

# PUBLIC HEALTH REPORTS

VOL. 30

SEPTEMBER 17, 1915

No. 38

## COURT DECISIONS RELATING TO PUBLIC HEALTH.

### A RÉSUMÉ OF RECENT JUDICIAL OPINIONS ON MATTERS AFFECTING PUBLIC HEALTH ADMINISTRATION.

The following is a brief résumé of recent opinions rendered by judges in Federal and State courts on subjects which are of special interest to persons engaged in public-health work:

#### Occupational Diseases and Workmen's Compensation Laws.

The Supreme Judicial Court of Massachusetts rendered a number of decisions holding that workmen (or, in case of death, their dependents) were entitled to compensation under the Massachusetts workmen's compensation law, when the injury for which recovery was sought resulted from industrial diseases and not from "accidents" in the usual acceptance of that term.

In one of these cases it was held that blindness resulting from an acute attack of optic neuritis induced by poisonous coal-tar gases is a "personal injury arising out of and in the course of" employment within the meaning of the Massachusetts law providing for compensation for injuries to workmen. (Public Health Reports, June 12, 1914, p. 1583).

In the next case where this principle was involved the court held that under the workmen's compensation act of Massachusetts the term "personal injury" is not limited to injuries caused by external violence, physical force, or as the result of "accidents" in the sense in which that word is commonly used, but under the statute is to be given a much broader and more liberal meaning, and includes any bodily injury. It includes any injury or disease which arises out of and in the course of the employment and causes incapacity for work. Lead poisoning, according to the Massachusetts act, is therefore a "personal injury," if incurred by the employee during the course of his employment. (Public Health Reports, July 3, 1914, p. 1781.)

A third decision was to the same effect. A cook employed on a lighter was suffering from valvular disease of the heart. The disease was aggravated by his exertions in saving his personal effects when the lighter sank, and he died soon after. The industrial accident

board found that the death of the employee arose out of and in the course of his employment and the supreme court supported this view. (Public Health Reports, May 14, 1915, p. 1455.)

The Supreme Court of the State of Michigan, on the contrary, decided that occupational diseases were not included within the provisions of the Michigan compensation act. The law differs somewhat from the Massachusetts law, and the justice who wrote the opinion said: "It was not the intention of the legislature to provide compensation for industrial or occupational diseases, but for injuries arising from accidents alone." In reversing an award made by the industrial accident board of the State to the widow of an employee who died as the result of red-lead poisoning, the supreme court pointed out that if it had been the intention of the legislature to include occupational diseases, the clause would have been unconstitutional, since the title refers merely to "accidental" deaths and injuries and Michigan has a constitutional provision requiring the title of any law fully to express the object of the law. (Public Health Reports, Nov. 6, 1914, p. 2999.)

#### Venereal Diseases and the Regulation of Marriage.

The Wisconsin "eugenics law," which took effect January 1, 1914, excited much comment. The law requires each male applicant for a marriage license to secure a physician's certificate that he is free from venereal diseases. The decision of the Wisconsin Supreme Court upholding this law may be important, as it establishes a precedent which may serve as a guide in framing other laws intended to prevent the spread of venereal disease or to safeguard marriage.

So significant is the Wisconsin decision that a summary of it follows: The power of the State to control and regulate by reasonable laws the marriage relation and to prevent the contracting of marriage by persons afflicted with loathsome or hereditary diseases, which are liable either to be transmitted to the wife or inherited by the offspring, or both, must on principle be regarded as undeniable. When the legislature passes a constitutional law that law establishes public policy upon the subjects covered by it, and that policy is not open to question by the courts. Legislation requiring a certificate of health from males before a marriage license is issued and making no such requirement as to females is not unreasonable nor so discriminatory as to render the law unconstitutional. Under a law requiring a certificate from a physician that a "person is free from acquired venereal diseases so nearly as can be determined by physical examination and by the application of recognized clinical and laboratory tests of scientific search," the tests referred to are the tests recognized and used by the persons who are to make them, and it is not necessary for the

physician to apply the Wassermann test. This test is elaborate and could not be performed for the prescribed fee of \$3. (Public Health Reports, Sept. 11, 1914, p. 2391.)

#### **Owners of Tenements Required to Furnish Garbage Cans.**

The Wisconsin Supreme Court also upheld a law requiring owners of apartment houses, tenement houses, and lodging or boarding houses to furnish suitable covered receptacles for garbage, ashes, and refuse. The court declared that the State in the exercise of its police power had the right to pass reasonable health regulations, and that it was only where the power to regulate had been clearly abused that courts would declare the manner of using this power unconstitutional. The court also said that one provision of a law, which would be valid if left standing alone, should not be held to be void because some other provision of the same law, dealing with a different subject, may be invalid. (Public Health Reports, Sept. 18, 1914, p. 2455.)

#### **Meat-Inspection—City Ordinances Valid.**

City ordinances requiring the inspection of meat which is to be sold in the cities adopting the ordinances were held valid by the courts of New Jersey and Maine. In the former case it was held that the fact that the plaintiff held a license from the State board of health authorizing him to slaughter animals did not authorize him to sell the meat from those animals in the city without complying with the city ordinance. The ordinance held valid provided that meat sold in the city must be examined by an inspector before and after slaughter. The Maine ordinance, also upheld by the supreme court of that State, requires the inspection of carcasses when the meat is to be sold. (Public Health Reports, Aug. 14, 1914, p. 2149; Sept. 18, 1914, p. 2456.)

#### **Physicians' Services During Epidemics—Compensation.**

The Supreme Court of Nebraska rendered two decisions holding that during epidemics physicians acting under orders from the State board of health or county boards of health are entitled to extra compensation for unusual services. (Public Health Reports, Aug. 14, 1914, pp. 2151 and 2153.)

#### **Habit-forming Drugs—Sale of.**

The Georgia Court of Appeals held that testimony of cocaine users that the drug had been purchased from the defendant on several occasions is sufficient to sustain a verdict of guilty which was rendered by the jury, although the analysis of a sample purchased for the purpose of securing evidence failed to show any trace of cocaine.

The court declared that there was no hard and fast rule requiring that the nature of a drug should be proved by chemical analysis and not otherwise. (Public Health Reports, Aug. 14, 1914, p. 2154.)

Another decision concerning habit-forming drugs was made by the Kentucky Court of Appeals, which held that in an indictment for violation of a statute which prohibits the sale of "opium or its alkaloidal salts or their derivatives" it is sufficient to charge that the defendant sold "morphine." According to the court, the Kentucky law of 1913 prohibiting the sale of opium or its alkaloidal salts or their derivatives for any purpose other than for "legitimate use" is sufficiently definite to be enforceable and valid. (Public Health Reports, Jan. 1, 1915, p. 53.)

#### **Tuberculin Tests of Dairy Cows.**

That the requirement that the cows used in dairy business, where milk is sold generally to the people, should be inspected as to their health twice during the year does not violate the constitution of Mississippi nor section 1 of the fourteenth amendment to the Federal Constitution was the view in a decision handed down by the Supreme Court of Mississippi during the year. The court also declared that the purpose of such a regulation was to prevent the spread of disease among human beings, and that therefore its promulgation and enforcement by the State board of health, rather than by the live-stock sanitary board, was proper. (Public Health Reports, Apr. 9, 1915, p. 1111.)

#### **Ant Poison—Sale of.**

The California act of 1913 relative to the sale of ant poison was construed by the California District Court of Appeals, Second District, as prohibiting the sale of ant poison containing arsenic except by registered pharmacists. In one section the act included ant poison among articles which could be sold by grocers and dealers generally without restriction, but in another section the sale of ant poison containing arsenic or certain other poisons was limited to licensed pharmacists. (Public Health Reports, June 18, 1915, p. 1851.)

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### **ESSENTIALS OF SWIMMING-POOL SANITATION.<sup>1</sup>**

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Swimming pools in the United States are growing enormously in number and popularity. Ninety-nine large municipalities (1) have established them, and the number is on the increase. The educa-

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<sup>1</sup> Read before the American Association to Promote Hygiene and Public Baths, City Hall, New York City, May 15, 1915.



tional importance of swimming has been greatly emphasized, many colleges and secondary schools having as a graduation requirement ability to swim. Swimming pools have also been established in clubs, steamships, and private residences. That their proper care and sanitation are of the utmost importance, therefore, is apparent. Accordingly, in order to secure data concerning the different swimming pools under different conditions of management, 46 were examined, but in this paper it is necessary to consider the results obtained from the examination of only six of these, to demonstrate the importance of refiltration and chemical disinfection in the care of swimming pools that are open to the public.

Within recent years the sanitation of swimming pools has been much studied. Some authors have emphasized the danger of contracting diseases, while others have sought means to make them safe.

Diseases transmissible from swimming in polluted water are chiefly of a venereal, ocular, aural, or intestinal nature (Aitken No. 2). Hertzka (3) and Sticker (4) demonstrated experimentally that bacillus prodigiosus can pass into the vagina of a woman while swimming. Skutch (5) reported an epidemic of vulvovaginitis that spread to 236 girls in a swimming pool at Posen. Fehr (6) and Schultz (7) reported cases of conjunctivitis and Cobb (8) of inflammation of the ear from swimming in contaminated water. Jäger (9), Pfuhl (10), Schäfer (11), Lenhartz (12), Klein and Schütz (13), Dresher (14), Witte (15), Kirchner (16), Hartog (17), Bassin (18), Maier (19), Baginsky (20), and others have reported cases of typhoid fever and other intestinal diseases in persons who had swum either in pool or in sewage-polluted water.

Typhoid fever in New York City is endemic, and at times epidemic. Jackson's report to the Merchants Association of New York (21) showed that the tides are inadequate in removing the solid masses of feces, and that there accumulate along the shore when the tides fall large masses of human excreta, in summer covered with flies. The Metropolitan Sewage Commission (22) has clearly pointed out the danger of typhoid fever to the community, due to the large bodies of contaminated water that surround New York. Rosenau, Lumsden, and Kastle (23) estimated that three-tenths of 1 per cent of the general population were typhoid carriers. Park (24, p. 288) reported the case of "Typhoid Mary," who infected 26 persons, some fatally, with typhoid fever, and who has recently been responsible for many more cases. Bolduan and Noble (25) gave an instance of a dairyman who disseminated typhoid bacilli for 42 years. In view of these facts the danger of typhoid carriers getting into a pool is considerable, and therefore an accurate index of a pool's contamination with intestinal bacteria is very important.

The study of methods of the sanitation of swimming pools has been directed either to refiltration or to chemical disinfection: Kister and Fromme (26), Angel (27), and Crane (28) have examined refiltration systems and found that not only did the appearance and sanitary condition of the water improve but that there resulted a material reduction in the cost of maintenance. In the chemical disinfection of swimming pools certain of the methods used in the purification of drinking water have been of value; copper sulphate was used by Stokes (29), Burrage (30), Rettger and Markley (31), and several others; Alexander (32) found the electrolysis of magnesium chloride effective, but the use of calcium hypochlorite has now supplanted all other methods. Burrage (33), Bunker (34), Aitken (35), Whipple (36), Lewis (37), Rettger and Markley (38), Lyster (39), Tully (40), The Engineering Record (unsigned) (41), Manheimer (42), Ravenel (43), Markley (44), and Bunker and Whipple (45) all have recommended its use for the purpose of disinfection after thorough tests of its efficiency had been made.

In the following analysis it will be shown that a combination of the methods of refiltration and chemical disinfection is the best means to secure a sanitary condition of a swimming pool.

#### Technique of Bacterial Water Analysis.

*Collection of samples.*—A standard weighted bottle (Abbott) was used for bottom and mid-depth samples. For surface collections a bottle was held by a wire clamp, so that only water at the surface flowed in. The necks of all bottles, prior to sterilization, were wrapped in stiff brown paper, so that the lips and stoppers would be protected from dust. During cold weather samples that reached the laboratory 30 minutes after collection were not ice packed. All other samples were placed in a copper box of two compartments, an upper one with racks for bottles, and a lower one for sawdust and ice. The temperature of bottles so transported was about 6° C.

#### Quantitative Bacterial Analysis.

Samples were plated in standard meat infusion agar and gelatin. The agar plates were incubated at 37.5° C, and the gelatin at 20° C. Counts were made 24 and 36 hours after plating on agar, and 4 and 5 days after plating on gelatin. The growths on these respective media represent different sections of the bacterial flora of the pool water examined; many bacteria will grow on neither medium, whilst the more rapid growers at high temperatures on the agar approximately represent the pollution.

Dilutions from samples were so made that 1 c. c. could always be plated, this being done so as to have the error normal to reading

pipettes always the same. Dilution tubes of 9 c. c. of salt solution were made in small quantities, kept on ice, and marked so that evaporation could be noticed. When plating, the sample or its dilution was added directly to the plate, the agar or gelatin being poured over. Several dilutions were made from each sample, and duplicate plates from each dilution. When any wide discrepancy occurred in counts of the same sample, the tests were discarded.

#### Qualitative Bacterial Analysis.

Qualitative analyses comprised attempts to isolate the typhoid bacillus and the colon bacillus. In the attempt to isolate the typhoid bacillus a special technique was devised and tested experimentally as follows: To 1½ liters of water inoculated with a known number of colon and typhoid bacilli was added 15 c. c. of pepton ox bile (without sugar). This mixture was placed in the incubator at 42.5° C.,<sup>1</sup> and left there undisturbed for 48 hours. Twenty c. c. were then drawn off the top and, following the method of Adami and Chapin, treated with enough inactivated typhoid immune serum to make a proportion of 1 of serum to 60 of water. The next day these tubes were centrifugalized and the precipitate washed in salt solution by several recentrifugalizations. A small part of the precipitate was then thoroughly emulsified in salt solution and plated in Hiss's medium. Suspicious colonies were fished, replated, and finally isolated on agar slants. The agglutinability of the bacilli so isolated was tested against a powerful serum. In nine determinations to discover the efficiency of this method it was found that when 50 to 75 typhoid bacilli in the presence of several thousand colon bacilli were added to 1½ liters of water the typhoid bacilli could be recovered, but that when less than that number were added the method was not always successful.

Ten pools were subjected to the above analysis, but no typhoid bacilli were found.

The presence of colon bacilli in water is usually attributed to sewage contamination. Though it might be supposed that the few colon bacilli present in a pool before use might grow to a noticeable extent, as a matter of fact no such growth was observed. In the pool examined, colon bacilli were not found in the water before use, the subsequent presence of these bacteria consequently is due to their addition by bathers. The tests for colon bacilli, before and

<sup>1</sup> In a study of the inhibition of elevated temperature to the growth of the colon-typhoid group, it was found that no marked inhibition occurred up to 43° C. With every additional degree above 37° C. more marked inhibition of the growth of water bacteria takes place. For this reason all colon-typhoid analyses were made at 42.5° C.

after the pool's use, therefore give an approximate index of a pool's pollution with intestinal bacteria by bathers.

In the tests for the presence of colon bacilli Jackson's lactose bile medium (46) was prepared by adding 1 per cent lactose and 1 per cent pepton to pure undiluted ox bile. This medium was tubed in standard fermentation tubes and sterilized in the Arnold steam sterilizer for 15 minutes for three days.<sup>1</sup> Five tubes were used for all samples, including tap-water controls, as follows:

- (1) To the first was added 1 c. c. of pool water.
- (2) To the second was added 1 c. c. of pool water.
- (3) To the third was added 1 c. c. of a tenth dilution of No. (2).
- (4) To the fourth was added 1 c. c. of a tenth dilution of No. (3).
- (5) To the fifth was added 1 c. c. of a tenth dilution of No. (4).

Thus each test was fully controlled.

Twenty per cent of gas in the closed arm of the fermentation tubes was considered positive for the presence of colon bacilli, after verifying tests had been made<sup>2</sup> (Jackson 46 and Manheimer 42).

#### Results of Bacterial Analysis.

The results obtained from the bacteriological examination of the following six pools were selected because they illustrate by comparison the superiority of refiltration and chemical disinfection to the ordinary methods of pool sanitation.

##### POOL NO. 1.

This pool is patronized by two classes of attendance. During the day it is used for teaching purposes in a high-school physical training course. In the evenings it is open to the male adult public without restriction or charge for its use. The daily attendance is about 400. The pool has a small capacity of 24,500 gallons, and uses unfiltered city water. Although this pool is quite shallow (5 feet at the deep end), its floor could not be seen. This was due to the large amount of suspended matter in unfiltered Croton water. This pool was examined in 1911 (A) when no chemical was added to the water and again in 1913 (B) when chloride of lime was employed as a disinfectant.

<sup>1</sup> Jackson recommends the autoclave for 15 minutes at 15 pounds pressure, but because of the possibility of hydrolyzing the lactose, and because of the frequent wetting of the cotton plugs by this method, discontinuous sterilization was preferred.

<sup>2</sup> The efficiency of the presumptive test for colon bacilli was demonstrated by plating on agar from all positive fermentation tubes and by fishing and identifying the colonies from the plates. Colon bacilli are practically always present in analysis of swimming pool water when a positive presumptive colon test is obtained.

Table 1 A.

SAMPLES AT A TIME WHEN NO CHEMICAL WAS USED.

Collection data.				Results of quantitative analysis.		Results of qualitative analysis.			
Time of collection.	Water in use (hours).	Level collected from—	Total attendance.	Bacteria in c. c.		Test for colon bacilli.			
				Agar at 37° C.	Agar at 20° C.	1.000	0.100	0.010	0.001
May 22, 1911, p. m.	12	Surface.....	400	2,400	31,600	+	+	—	—
Do.	12	Middle.....	400	1,000	7,400	+	+	—	—
Do.	12	Bottom.....	400	1,300	6,400	+	+	—	—
May 23, 1911, p. m.	36	Surface.....	800	16,800	57,240	+	+	+	—
Do.	36	Middle.....	800	8,600	76,320	+	+	—	—
Do.	36	Bottom.....	800	17,300	127,200	+	+	+	—
May 24, 1911, p. m.	60	Surface.....	1,200	7,300	25,440	+	+	—	—
Do.	60	Middle.....	1,200	6,400	50,880	+	+	—	—
Do.	60	Bottom.....	1,200	7,600	50,880	+	+	—	—

By reference to the above table, it will be seen that the number of bacteria in the water markedly increased after each day's use. The highest count was on the evening of the second day, when 127,200 bacteria in a cubic centimeter were obtained from an agar plate grown at 20° C. Colon bacilli were very numerous; 10 per c. c. or more being present in every sample.

Table 1 B.

Collection data.				Results of quantitative analysis.		Results of qualitative analysis.			
Time of collection.	Water in use (hours).	Level collected from.	Total attendance.	Bacteria in c. c.		Test for colon bacilli.			
				Agar at 37° C.	Gelatin at 20° C.	1.000	0.100	0.010	0.001
Tap sample on morning of first day				12	35	—	—	—	—
Apr. 7, a. m.	0	Surface.....	0	220	1,990	—	—	—	—
Apr. 7, p. m.	12	do.....	400	600	25,440	+	—	—	—
Do.	12	Bottom.....	400	3,200	12,720	+	—	—	—
Apr. 8, a. m.	36	Surface <sup>1</sup> .....	400	130	740	—	—	—	—
Apr. 8, p. m.	48	do.....	800	500	4,452	+	—	—	—
Do.	48	Bottom.....	800	7,800	165,360	+	—	—	—
Apr. 9, a. m.	60	Surface <sup>1</sup> .....	800	1,120	27,980	—	—	—	—
Apr. 9, p. m.	72	do.....	1,200	800	38,160	+	—	—	—
Do.	72	Bottom.....	1,200	800	38,430	+	—	—	—

<sup>1</sup> Treatment with hypochlorite.

In the above table the effect of the addition of chloride of lime can readily be observed. In no sample was more than one colon bacillus per cubic centimeter obtained, and the bacterial counts were relatively much lower than in Table 1A. Had the addition of the chemical been properly controlled, less bacteria would have been present in the water.



This pool was unsanitary largely because of the small volume of water offered to so large an attendance. Its condition improved greatly as a result of disinfection with calcium hypochlorites, but the addition of the chemical was not properly controlled, and the pool was a menace to the health of the high-school boys. To make this plant safe it is necessary to increase its cubic capacity and install a refiltering plant.

## POOL NO. 2.

This pool is open to the general public, without charge, accommodating on alternate days a very large attendance of men and women. It has a capacity exceeding 80,000 gallons, uses filtered city water, with alum as a coagulant. The cost of maintenance of this bath (47) is \$29,798.49, exclusive of the cost of water, which would be approximately \$450 a year.

This pool was examined (A) when refilled every day, (B) when refilled every second day, and (C) when refilled every third day. After one day's use of this pool the water became cloudy and the pool's floor was therefore obscured.

Table 2 A.

## POOL EMPTIED EVERY DAY.

Collection data.				Results of quantitative analysis.		Results of qualitative analysis.			
Time of collection.	Water in use (hours).	Level collected from.	Total attendance.	Bacteria in c. c.		Test for colon bacilli.			
				Agar at 37° C.	Gelatin at 20° C.	1,000	0.100	0.010	0.001
Apr. 20, 1911.....	5	Surface.....	50	5,600	( <sup>1</sup> )	+	-	-	-
Do.....	5	Middle.....	50	1,600	( <sup>1</sup> )	+	-	-	-
Do.....	5	Bottom.....	50	2,700	( <sup>1</sup> )	+	+	-	-

<sup>1</sup> Not made.

Bacterial counts ranged from 1,600 to 5,600 per c. c. and colon bacilli were always present in 1 c. c. Only 50 women had used the pool; therefore, its polluted condition was undoubtedly due as much to insufficient cleansing before filling as to the debris added by the bathers. The cost of daily refilling is great, and judged by the above bacterial data not very efficient from a sanitary point of view.

Table 2 B.

## POOL EMPTIED EVERY SECOND DAY.

Collection data.				Results of quantitative analysis.		Results of qualitative analysis.			
Time of collection.	Water in use (hours).	Level collected from—	Total attendance.	Bacteria in c. c.		Test for colon bacilli.			
				Agar at 37° C.	Gelatin at 20° C.	1.000	0.100	0.010	0.001
Tap sample on morning of first day.				12	137	—	—	—	—
Same water passed through filter.				3	68	—	—	—	—
Mar. 4, 1913, a. m.	3	Surface.....	10	260	3,180	—	—	—	—
Mar. 4, 1913, p. m.	12	do.....	202	1,700	20,500	+	—	—	—
Do.....	12	Middle.....	202	1,600	14,600	+	+	—	—
Do.....	12	Bottom.....	202	3,600	11,100	+	—	—	—
Mar. 5, 1913, a. m.	26	Surface.....	202	700	1,300	+	—	—	—
Mar. 5, 1913, p. m.	38	do.....	1,600	445,200	879,400	+	+	—	—
Do.....	38	Middle.....	1,600	655,800	636,000	+	—	—	—
Do.....	38	Bottom.....	1,600	162,200	667,700	+	—	—	—

## SEPARATE SAMPLE AFTER ONE DAY'S USE BY MEN.

Mar. 3, 1913, p. m.....	12	Surface.....	1,400	216,240	222,260	+	—	—	—
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When the pool was refilled every other day, the rise in the number of bacteria was much greater than when refilled daily. Tap water gave a bacterial count of 137 per c. c. This water after being passed through the filter was cleared, and the bacterial count reduced to 68 per c. c. As soon as the pool was used the bacterial counts increased enormously; at the end of the first day the average count was 15,000 per c. c. and at the end of the second day, over 650,000 per c. c. Colon bacilli were present in every sample taken after the first day's use of the pool, and at times 10 colon bacilli per c. c. were obtained. This pool was in very insanitary condition, therefore, when practicing refillings every other day.

Table 2 C.

## POOL EMPTIED EVERY THIRD DAY.

Collection data.				Results of quantitative analysis.		Results of qualitative analysis.			
Time of collection.	Water in use (hours).	Level collected from.	Total attendance.	Bacteria in 1 c. c.		Test for colon bacilli.			
				Agar at 37° C.	Gelatin at 20° C.	1.000	0.100	0.010	0.001
Mar. 16, 1911.....	5	Surface.....	0	300	450	—	—	—	—
Do.....	5	Middle.....	0	90	30	—	—	—	—
Do.....	5	Bottom.....	0	10	40	—	—	—	—
Mar. 22, 1911.....	60	Surface.....	1,000	12,380	20,600	+	+	+	—
Do.....	60	Middle.....	1,000	12,140	22,250	+	+	+	—
Do.....	60	Bottom.....	1,000	11,740	25,440	+	+	+	—

When the pool was refilled every third day, the condition became somewhat worse than in the case of either of the two previously discussed methods. Though the counts were no higher (see table), colon bacilli were more numerous, and at the end of the third day 100 colon bacilli per c. c. were found in all samples.

It is clear that this pool, even when refilling daily, was not in satisfactory condition, though plenty of water was used and no expense saved in management. The large and promiscuous attendance and lack of proper supervision mainly account for its polluted condition.

## POOL NO. 3.

This pool empties once a week and practices refiltration. It has a capacity of 55,000 gallons and is situated on the top floor, advantage being taken of this elevated position to use the pool water for flushing closets, urinals, and traps throughout the building. About 145,000 gallons are drawn weekly from the pool, fresh water, of course, being added in its place. This is equivalent to two and one-half refillings per week. The cost of extra-heavy construction to sustain the weight of the pool on the top floor of the building and the cost of additional plumbing for separate flushing purposes are soon compensated for by the economy in water.

Table 3 A.

Collection data.				Results of quantitative analysis.		Results of qualitative analysis.			
Time of collection.	Water in use (hours).	Level collected from—	Total attendance.	Bacteria in c. c.		Test for colon bacilli.			
				Agar at 37° C.	Gelatin at 20° C.	1.000	0.100	0.010	0.001
Tap sample, morning of first day.				5	65	—	—	—	—
Same sample, through filter taken from pool.				40	190	—	—	—	—
Sample from filter before it reached pool.				43	42	—	—	—	—
Filtrate, obtained by reversing the filter.				10,000	61,000	+	+	+	—
Mar. 10, 1913, p. m.	12	Surface.....	250	200	89,040	—	—	—	—
Do .....	12	Middle.....	250	100	48,000	—	—	—	—
Do .....	12	Bottom.....	250	200	49,000	+	—	—	—
Mar. 12, 1913, a. m.	48	Surface.....	500	120	360	—	—	—	—
Do .....	60	do .....	700	1,500	4,800	—	—	—	—
Mar. 12, 1913, p. m.	60	Middle.....	700	1,100	6,360	+	—	—	—
Do .....	60	Bottom.....	700	300	4,400	—	—	—	—
Mar. 14, 1913, a. m.	98	Surface.....	1,300	130	340	+	—	—	—

## TESTS MADE IN 1911.

					Agar, 20°.				
May 3, 1911, p. m.	72	Surface.....	1,200	500	5,200	—	—	—	—
Do .....	72	Middle.....	1,200	500	1,000	—	—	—	—
Do .....	72	Bottom.....	1,200	600	4,000	—	—	—	—
June 2, 1911, p. m.	120	Surface.....	1,500	500	1,200	—	—	—	—
Do .....	120	Middle.....	1,500	600	1,200	—	—	—	—
Do .....	120	Bottom.....	1,500	30,000	2,400	—	—	—	—

The highest counts obtained from samples taken during the entire week was 6,360 bacteria per c. c. Colon bacilli were not uniformly found. The sanitary condition of this plant was exceedingly good. The addition of small quantities of chloride of lime to the water would undoubtedly have rendered this pool almost ideal.

## POOL NO. 4.

Wealthy clubmen use this pool. It has a capacity exceeding 90,000 gallons, uses filtered city water, with no chemical treatment, refills every two weeks, and practices dilution, equivalent to another filling in the two weeks. Its average daily attendance is about 30. All the men using this pool have had, preliminary to swimming, either a Turkish or thorough soap bath.

Table 4 A.

Collection data.				Results of quantitative analysis.		Results of qualitative analysis.			
Time of collection.	Water in use (hours).	Level collected from—	Total attendance.	Bacteria in c. c.		Test for colon bacilli.			
				Agar at 37° C.	Gelatin at 20° C.	1.000	0.100	0.010	0.001
Filtered water, first day of use. <sup>1</sup>				5	254	—	—	—	—
Apr. 7, 1913, a. m. <sup>2</sup>	0	Surface.....	0	330,700	171,720	+	+	—	—
Apr. 14, 1913, a. m.	168	do.....	180	130	350	—	—	—	—
Apr. 14, 1913, p. m.	180	do.....	200	700	6,860	+	—	—	—
Do.....	180	Bottom.....	200	3,600	13,200	+	—	—	—
Apr. 22, 1913, a. m.	360	Surface.....	450	200	6,360	—	—	—	—
Apr. 22, 1913, p. m.	372	do.....	480	100	1,400	—	—	—	—
Do.....	372	Bottom.....	480	300	700	—	—	—	—
Apr. 23, 1913, a. m.	384	Surface.....	480	180	230	—	—	—	—
Apr. 23, 1913, p. m.	396	do.....	500	300	2,100	—	—	—	—
Do.....	396	Bottom.....	500	400	4,400	—	—	—	—
Apr. 24, 1913, a. m.	408	Surface.....	500	180	3,890	+	—	—	—
Apr. 24, 1913, p. m.	420	do.....	530	600	3,800	+	—	—	—
Do.....	420	Bottom.....	530	300	1,300	+	—	—	—

<sup>1</sup> Tap (unfiltered) water, not available.

<sup>2</sup> Only 1,000 gallons in pool; high count due to small volume and to insufficient cleansing of floor of pool.

The table above indicates the excellent condition of the water. The highest count obtained was 13,200 bacteria per c. c. from a sample collected after the pool had been used a little more than a week. Colon bacilli were found in 1 c. c. of the pool water only in a few of the samples. In addition to this good sanitary condition of the water, the floor could be seen during the entire two weeks.

When it is considered that 180,000 gallons of water are offered for a total of 530 baths, and, furthermore, that the preliminary baths of members were very thorough, one is little surprised to find so excellent a condition. The cost of maintenance of this bath, however, is excessive.

## POOL NO. 5.

This pool has a capacity of 100,000 gallons, uses filtered city water, with no chemical treatment. It has a large attendance of college men, aggregating 2,000 a week. A constant stream of fresh water is kept running through, about 450,000 gallons of water being used each week. This pool was examined under three different conditions: (A) when filled twice a week; (B) when new filters were installed, and the pool filled once a week; and finally (C) when filtered, diluted, etc., the same as in "B," but at a time when temporarily not used for bathing.

Table 5 A.

Collection data.				Results of quantitative analysis.		Results of qualitative analysis.			
Time of collection.	Water in use (hours).	Level collected from—	Total attendance.	Bacteria in c. c.		Test for colon bacilli.			
				Agar at 37° C.	Gelatin at 20° C.	1.000	0.100	0.010	0.001
Apr. 10, 1911, a. m. ....	12	Surface.....	0	190	440	—	—	—	—
Do. ....	12	Middle.....	0	100	440	—	—	—	—
Do. ....	12	Bottom.....	0	70	530	—	—	—	—
Apr. 10, 1911, p. m. ....	19	Surface.....	400	2,100	3,000	—	—	—	—
Do. ....	19	Middle.....	400	900	1,800	—	—	—	—
Do. ....	19	Bottom.....	400	500	2,100	+	—	—	—
Apr. 11, 1911, p. m. ....	33	Surface.....	700	3,300	21,700	+	+	—	—
Do. ....	33	Middle.....	700	2,400	4,900	+	—	—	—
Do. ....	33	Bottom.....	700	2,700	6,900	+	—	—	—
Apr. 12, 1911, p. m. ....	57	Surface.....	1,200	1,100	2,300	—	—	—	—
Do. ....	57	Middle.....	1,200	600	1,700	—	—	—	—
Do. ....	57	Bottom.....	1,200	2,200	3,000	—	—	—	—

Table 5 B.

Collection data.				Results of quantitative analysis.		Results of qualitative analysis.			
Time of collection.	Water in use (hours).	Level collected from—	Total attendance.	Bacteria in c. c.		Test for colon bacilli.			
				Agar at 37° C.	Gelatin at 20° C.	1.000	0.100	0.010	0.001
Feb. 17, 1913, p. m. ....	9	Surface.....	400	500	{ Not made. }	—	—	—	—
Do. ....	9	Middle.....	400	300	do. ....	—	—	—	—
Do. ....	9	Bottom.....	400	100	do. ....	—	—	—	—
Feb. 18, 1913, p. m. ....	33	Surface.....	800	300	do. ....	+	—	—	—
Do. ....	33	Middle.....	800	900	do. ....	—	—	—	—
Do. ....	33	Bottom.....	800	1,400	do. ....	+	—	—	—
Feb. 19, 1913, p. m. ....	57	Surface.....	1,200	5,800	do. ....	—	—	—	—
Do. ....	57	Middle.....	1,200	2,000	do. ....	+	—	—	—
Do. ....	57	Bottom.....	1,200	1,800	do. ....	—	—	—	—
Feb. 20, 1913, p. m. ....	81	Surface.....	1,600	17,000	do. ....	—	—	—	—
Do. ....	81	Middle.....	1,600	16,500	do. ....	—	—	—	—
Do. ....	81	Bottom.....	1,600	14,000	do. ....	+	—	—	—
Feb. 21, 1913, p. m. ....	105	Surface.....	2,000	200	do. ....	—	—	—	—
Do. ....	105	Middle.....	2,000	400	do. ....	—	—	—	—
Do. ....	105	Bottom.....	2,000	500	do. ....	—	—	—	—



Table 5 C.

TEST OF MORNING SAMPLES AT A TIME WHEN THE POOL WAS NOT ATTENDED.  
THE EFFECT OF DILUTION IS HERE PLAIN.

Collection data.				Results of quantitative analysis.		Results of qualitative analysis.			
Time of collection.	Water in use (hours).	Level collected from—	Total attendance.	Bacteria in c. c.		Test for colon bacilli.			
				Agar at 37° C.	Gelatin at 20° C.	1.000	0.100	0.010	0.001
A. M.									
Tap water on morning of first day.				13	192	—	—	—	—
Same water through filter (taken from pool).				0	3	—	—	—	—
May 13, 1913.	24	Surface.	0	20	10	—	—	—	—
May 14, 1913.	48	do.	0	2	35	—	—	—	—
May 15, 1913.	72	do.	0	160	280	—	—	—	—

By examining the tables it will be seen that the sanitary condition of the water was always satisfactory. Low counts were usually obtained, and colon bacilli, though present, were never abundant. In Table 5C the only varying factor from the pool's usual procedure was that it was not used for swimming during the entire week. The water was somewhat superior from a bacteriological point of view to the drinking water from the tap, but the filters were unable to clarify it.

The filters were worked far beyond their capacity. They should have been operated much more slowly, cleaned more frequently, and the water from the pool recirculated through them. In this way the water would have been freed from suspended matter, and the danger from drowning, which actually occurred, much diminished. The addition of chlorine, properly controlled, might have been effective in keeping down the bacterial content, and so perfected this otherwise excellently managed bath.

#### POOL NO. 6.

This pool has a capacity of 250,000 gallons, and uses filtered city water, with alum as a coagulant. The student body, all college men, as in the previous case, are well instructed in pool sanitation and the plant in general is well supervised. The pool was examined at three different times, once when refilling every third week, again when chloride of lime was used in addition to the refilling every third week, and finally, when a new filter was installed, refiltration and chlorination practiced and the water retained for months.

Table 6 A.

## NO CHEMICAL USED.

Collection data.				Results of quantitative analysis.		Results of qualitative analysis.			
Time of collection.	Water in use (days).	Level collected from—	Total attendance.	Bacteria in c. c.		Test for colon bacilli.			
				Agar at 37° C.	Gelatin at 20° C.	1.000	0.100	0.010	0.001
May 3, 1911.....	17	Surface.....	3,000	72,200	190,800	+	—	—	—
Do.....	17	Middle.....	3,000	160,000	139,900	+	—	—	—
Do.....	17	Bottom.....	3,000	41,600	171,700	+	—	—	—
May 5, 1911.....	19	Surface.....	3,400	31,000	109,000	+	—	—	—
Do.....	19	Middle.....	3,400	36,000	79,000	+	—	—	—
Do.....	19	Bottom.....	3,400	40,000	50,000	+	—	—	—

When the above data were collected no sanitary precautions were observed, other than the addition of dilution water sufficient to approximate a weekly filling. The filters were worked beyond their capacity to clarify the water, therefore the pool's floor could not be seen. The bacterial counts were as high as 160,000 per c. c. Colon bacilli were present in 1 c. c. of every sample.

Table 6 B.

## CHEMICAL USED.

Collection data.				Results of quantitative analysis.		Results of qualitative analysis.			
Time of collection.	Water in use (days).	Level collected from—	Total attendance.	Bacteria in c. c.		Test for colon bacilli.			
				Agar at 37° C.	Gelatin at 20° C.	1.000	0.100	0.010	0.001
May 8, 1911.....	4	Surface.....	800	300	900	—	—	—	—
Do.....	4	Middle.....	800	300	1,000	—	—	—	—
Do.....	4	Bottom.....	800	100	3,200	—	—	—	—

## CHEMICAL ADDED NIGHT BEFORE.

May 10, 1911.....	6	Surface.....	1,000	0	0	—	—	—	—
Do.....	6	Middle.....	1,000	0	300	—	—	—	—
Do.....	6	Bottom.....	1,000	0	0	—	—	—	—
May 26, 1911.....	22	Surface.....	3,000	0	100	—	—	—	—
Do.....	22	Middle.....	3,000	0	200	—	—	—	—
Do.....	22	Bottom.....	3,000	0	100	—	—	—	—

## NO CHEMICAL ADDED THE NIGHT BEFORE.

May 27, 1911.....	23	Surface.....	3,000	300	2,100	—	—	—	—
Do.....	23	Middle.....	3,000	500	1,400	—	—	—	—
Do.....	23	Bottom.....	3,000	2,000	3,000	—	—	—	—

Here the technique of management was varied only in one particular, i. e., chloride of lime was added to the water, in an amount to make a proportion of one of chloride to one million of water. The

bacterial counts rarely were higher than those of drinking water, while many of the samples were entirely sterile. The efficiency of this procedure was thereby demonstrated.

Table 6 C.

Collection data.				Results of quantitative analysis.		Results of qualitative analysis.			
Time of collection.	Water in use (time).	Level collected from—	Total attendance.	Bacteria in c. c.		Test for colon bacilli.			
				Agar at 37° C.	Gelatin at 20° C.	1.000	0.100	0.010	0.001
Sample from tap, morning of first day.....	.....	.....	.....	20	60	—	—	—	—

## ANHYDROUS CHLORINE USED.

May 12, 1913, a. m. ....	1 week	Surface.....	1,800	5	540	—	—	—	—
May 12, 1913, p. m. ....	7½ days	do.....	2,100	10	860	—	—	—	—
Do.....	do..	Bottom.....	2,100	70	450	—	—	—	—
May 13, 1913, a. m. ....	9 days	Surface.....	2,100	50	290	—	—	—	—
May 13, 1913, p. m. ....	9½ days	do.....	2,400	60	620	—	—	—	—
Do.....	do..	Bottom.....	2,400	30	520	—	—	—	—
May 14, 1913, a. m. ....	10 days	Surface.....	2,400	70	420	—	—	—	—
Sample from refilter.....	.....	.....	.....	5	410	—	—	—	—

## TESTS MADE WHEN CALCIUM HYPOCHLORITE WAS USED.

February 17, 1913, p. m..	7 days	Surface.....	2,100	100	Not made	—	—	—	—
Do.....	do..	Middle.....	2,100	2,800	do.....	—	—	—	—
Do.....	do..	Bottom.....	2,100	800	do.....	—	—	—	—
February 21, 1913, p. m..	11 days	Surface.....	3,300	1,500	do.....	—	—	—	—
Do.....	do..	Middle.....	3,300	2,300	do.....	—	—	—	—
Do.....	do..	Bottom.....	3,300	2,400	do.....	—	—	—	—

The cloudy condition of the water, which makes the danger of accidental drowning great, caused the director in charge to have a new filtering plant installed. Refiltration was then practiced, and the water thereby rendered exceedingly clear. Chloride of lime and anhydrous chlorine (Buswell No. 48) were added to the water in carefully controlled amounts. When the hypochlorite was used no colon bacilli were found. The highest bacterial counts obtained were 2,800 and 2,300 per c. c. When anhydrous chlorine was used the counts were somewhat lower, averaging about 500 bacteria per c. c., colon bacilli never being found in 1 c. c. The improved appearance and sanitary condition of the water are sufficient reasons for making this procedure standard.

## Conclusions.

1. The cubic capacity of a pool affects its sanitary condition. Pool No. 1, of small capacity, was never in a satisfactory condition, even when disinfecting with calcium hypochlorite, while Pool No. 4,

using no chemical purifier, and depending entirely upon the use of a large body of water for a relatively small attendance, was in excellent condition.

2. The process of adding dilution water is an efficient means of reducing the bacterial content of the water of a pool, as evidenced in pools Nos. 3 and 5. In these two pools, accommodating large attendances, the water was kept bacterially pure mainly through that means.

3. The supervision of the plant and the class of attendance are also important factors in pool sanitation. The sanitary condition of pool No. 5 as compared with that of pool No. 2 illustrates this point admirably. Though both of these pools have the same general technique of management, the sanitary condition of pool No. 5 is far superior to that of pool No. 2, largely because of the careful supervision of the plant on the part of the director and the superior practice of hygiene on the part of college men as compared with that of the general public.

4. Refiltration is an adequate means of clarifying the water, thereby making it possible to see a submerged person. In pools Nos. 3 and 6 the water was rendered very clear by this method. In all the other pools where refiltration was not practiced, the water became so clouded after one day's use that the pool's floor could not be seen, thus increasing the danger of accidental drowning.

5. Chemical disinfection with calcium hypochlorite is effective, as evidenced from pool No. 6. If added infrequently, however, or in too small a quantity, as in pool No. 1, its value is largely lost. When employing this chemical, therefore, the quantity dissolved in the water should be measured from time to time by any simple device, such as that suggested by Woodhead (49), and a trace of chlorine kept constantly present.

6. The combination of refiltration and chlorination as practiced in pool No. 6 rendered the sanitary condition of the water excellent, besides keeping it continuously clear and reducing the cost of operation. It is believed, therefore, that the most important mode of keeping a pool in a safe and sanitary condition is by the combined method of refiltration and chlorination for the respective purposes of clarification and disinfection.

The writer wishes to express thanks to Dr. Hans Zinsser and to Dr. Augustus B. Wadsworth for the material help rendered during the course of the work.

#### Bibliography.

1. Bulletin of the Bureau of Labor, Sept., 1904, pp. 1245-1367.
2. Aitken: Proc. Ill. Water Supply Assoc., 1911, 3, p. 73.
3. Hertzka: Monatschr. f. Geburtsh. u. Gynäk., 1902, 16, p. 3.
4. Sticker: Zeitschr. f. Geburtsh. u. Gynäk., 1901, 45, p. 510.

5. Skutch: *Centralbl. f. Bakteriologie*, 1892, 12, p. 309.
6. Fehr: *Berl. Klin. Wchnschr.*, 1900, 1, p. 37.
7. Schultz: *Ibid*, 1899, 39, p. 36.
8. Cobb: *Boston Med. and Surg. Jour.*, 1908, 159, p. 9.
9. Jäger: *Zeitschr. f.-Hyg. u. Infektionskrankh.*, 1892, 12, p. 525.
10. Pfuhl: *Deutsche Mil. Wchnschr.*, 1888, 17, p. 9.
11. Schäfer: *Ibid*, 1890, 36, p. 39.
12. Lenhartz: *München Med. Wchnschr.*, 1892, 6, p. 898.
13. Klein and Schütz: *Wien. Med. Wchnschr.*, 1898, 6, p. 238.
14. Drescher: *Sanitätsber. u. d. Kgl. Preuss. Armee*, 1898.
15. Witte: *Ibid*, 1898.
16. Kirchner: *Deutsche Mil. Wchnschr.*, 1888, 17, p. 95.
17. Hartog: *Sanitätsber. u. d. Kgl. Preuss. Armee.*, 1897.
18. Bassin: *Ibid*, 1896.
19. Maier: *Proc. Roy. Med. and Chir. Soc. London*, 1908, 2, p. 227.
20. Baginsky: *Hyg. Rundschau*, 1896, 6, p. 597.
21. Jackson: *Pollution of New York Bay, Merchants' Assoc. of N. Y.*, 1909.
22. Rept. Met. Sewage Com., New York City, 1908-1910.
23. Rosenau Lumsden and Kastle: *Bull. 52, U. S. P. H. S.*, 1909.
24. Park: *Pathogenic Bacteria and Protozoa*.
25. Bolduan and Noble: *Jour. Am. Med. Assoc.*, 1912, 58, p. 7.
26. Kister and Fromme: *Gesundheits Ingenieur*, 1910, 30, p. 30.
27. Angel: *Assoc. Mun. and County, Eng.*, 1908, 34, p. 960.
28. Crane: *Eng. List*, 1912, 21, pp. 11-43, and *Proc. Am. Assoc. Promote Hyg. and Pub. baths*, 1913.
29. Stokes: *Am. Med.*, 1905, 10, p. 1075.
30. Burrage: *Proc. Ind. As. of Sc.*, 1909.
31. Rettger and Markley: *Eng. News*, 1911, 66, p. 699.
32. Alexander: *Scient. Am. Supp.*, 1909, 68, p. 1765.
33. Burrage: *Proc. Ind. As. of Sc.*, 1909.
34. Bunker: *Am. Jour. Pub. Health*, 1910, 20.
35. Aitken: *Proc. Ill. Water Supp. Assoc.*, 1911, 3, p. 73.
36. Whipple: *Mun. Jour. and Eng.*, 1911, 31, p. 577.
37. Lewis: *Eng. News*, 1911, 65, p. 636.
38. Rettger and Markley: *Eng. News*, 1911, 66, p. 699.
39. Lyster: *Jour. Am. Med. Assoc.*, 1911, 57, p. 1992.
40. Tully: *Am. Jour. Pub. Health*, 1912, 11, p. 1186.
41. *Eng. Record*, 1912, 65, p. 699.
42. Manheimer: *Am. Phy. Ed. Rev.*, 1912, 17, p. 669, and *Jour. Inf. Dis.*, 15, no. 1; p. 159.
43. Ravenel: *Am. Phy. Ed. Rev.*, 1912, 17, p. 684.
44. Markley: *Ibid*, Feb., 1913.
45. Bunker and Whipple: *Ibid*, p. 75.
46. *Jour. Inf. Dis.*, 1910, 7, p. 587; *ibid*, 1909, 6, 289; *ibid*, 1911, 8, p. 289; *Jour. Ind. and Eng. Chem.*, 1909, 1, p. 328; *Jour. Inf. Dis.*, 1907, Supp. 3, p. 300; *ibid*, 1911, 8, p. 241.
47. Rept. of the President of the Borough of Manhattan, N. Y. City, 1912.
48. Buswell: *Am. Phy. Ed. Rev.*, 1913, 17, p. 395.
49. Woodhead: *Jour. Roy. San. Inst.*, Sept., 1910, p. 281.



**PLAGUE-PREVENTION WORK.****HAWAII—PLAGUE PREVENTION.**

The following reports of plague-prevention work in Hawaii were received from Surg. Trotter, of the United States Public Health Service:

**Honolulu.****WEEK ENDED AUG. 21, 1915.**

Total rats and mongoose taken.....	270	Classification of rats killed by sulphur dioxide:	
Rats trapped.....	266	Mus alexandrinus.....	1
Mongoose trapped.....	2	Average number of traps set daily.....	984
Rats found dead (mus alexandrinus).....	1	Cost per rat destroyed.....cents..	26½
Rats killed by sulphur dioxide.....	1	Last case rat plague, Aiea, 9 miles from Honolulu,	
Examined microscopically.....	245	Apr. 12, 1910.	
Showing plague infection.....	0	Last case human plague, Honolulu, July 12, 1910.	
Classification of rats trapped:		Last case rat plague, Kalopa Stable, Paauhau,	
Mus alexandrinus.....	114	Hawaii, Aug. 29, 1914.	
Mus musculus.....	66	Last case human plague, Paauhau landing, Hawaii,	
Mus norvegicus.....	80	Aug. 16, 1914.	
Mus rattus.....	6		

**Hilo.****WEEK ENDED AUG. 7, 1915.**

Rats and mongoose taken.....	2,301	Classification of rats trapped and found dead:	
Rats trapped.....	2,261	Mus norvegicus.....	525
Mongoose taken.....	40	Mus alexandrinus.....	250
Rats and mongoose examined macroscopically	2,301	Mus rattus.....	721
Rats and mongoose plague infected.....	0	Mus musculus.....	765

**WEEK ENDED AUG. 14, 1915.**

Rats and mongoose taken.....	2,250	Classification of rats trapped and found dead—	
Rats trapped.....	2,205	Continued.	
Mongoose taken.....	45	Mus rattus.....	736
Rats and mongoose examined macroscopically	2,250	Mus musculus.....	657
Rats and mongoose plague infected.....	0	Last case of rat plague, Paauhau Sugar Co., Aug. 29,	
Classification of rats trapped and found dead:		1914.	
Mus norvegicus.....	517	Last case of human plague, Paauhau Sugar Co., Aug.	
Mus alexandrinus.....	295	16, 1914.	

## PREVALENCE OF DISEASE.

*No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring.*

### IN CERTAIN STATES AND CITIES.

#### CEREBROSPINAL MENINGITIS.

City Reports for Week Ended Aug. 28, 1915.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Boston, Mass.....	1	1	Nashville, Tenn.....	1	1
Chicago, Ill.....	23	1	Newark, N. J.....	1	1
Cleveland, Ohio.....	4	3	St. Louis, Mo.....	2	1
Dubuque, Iowa.....	11	11	Superior, Wis.....	1	1
Kansas City, Kans.....	3	1	Toledo, Ohio.....	1	1

#### DIPHTHERIA.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 2818.

#### ERYSIPELAS.

City Reports for Week Ended Aug. 28, 1915.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Akron, Ohio.....	1	.....	New York, N. Y.....	.....	4
Chicago, Ill.....	6	.....	Philadelphia, Pa.....	3	.....
Cleveland, Ohio.....	2	1	Reading, Pa.....	1	.....
Johnstown, Pa.....	1	.....	St. Louis, Mo.....	2	.....
Los Angeles, Cal.....	1	.....	San Francisco, Cal.....	2	.....
New Orleans, La.....	.....	1	Superior, Wis.....	.....	1

#### LEPROSY.

Michigan—Detroit.

During the week ended August 28, 1915, one death from leprosy was notified in Detroit, Mich.

(2813)

**MALARIA.****Arkansas Report for July, 1915.**

Collaborating Epidemiologist Garrison reported that during the month of July, 1915, 1,343 cases of malaria were notified in Arkansas.

**City Reports for Week Ended Aug. 28, 1915.**

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Berkeley, Cal.....	3	.....	Philadelphia, Pa.....	7	4
Boston, Mass.....	1	.....	Plainfield, N. J.....	2	.....
Charleston, S. C.....	.....	1	Sacramento, Cal.....	2	.....
Newark, N. J.....	2	.....	Wilmington, N. C.....	2	.....
New Orleans, La.....	.....	2			

**MEASLES.**

See Diphtheria, measles, scarlet fever, and tuberculosis, page 2818.

**PELLAGRA.****Arkansas Report for July, 1915.**

Collaborating Epidemiologist Garrison reported that during the month of July, 1915, 309 cases of pellagra were notified in Arkansas.

**City Reports for Week Ended Aug. 28, 1915.**

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Charleston, S. C.....	.....	3	Nashville, Tenn.....	1	.....
Chicago, Ill.....	.....	1	New Orleans, La.....	2	2
Galveston, Tex.....	1	1	Richmond, Va.....	.....	1

**PLAGUE.****Louisiana—New Orleans—Plague-Infected Rat Found.**

Surg. Creel reported by telegraph September 12, 1915, that a plague-infected rat had been found at No. 1423 Joseph Street, between Garfield and Hurst Streets.

**PNEUMONIA.****City Reports for Week Ended Aug. 28, 1915.**

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Auburn, N. Y.....	1	.....	Galveston, Tex.....	1	1
Binghamton, N. Y.....	1	1	Kalamazoo, Mich.....	3	.....
Braddock, Pa.....	1	.....	Los Angeles, Cal.....	5	3
Chicago, Ill.....	38	22	Newark, N. J.....	2	3
Cleveland, Ohio.....	12	12	Norfolk, Va.....	1	1
Dayton, Ohio.....	1	1	San Francisco, Cal.....	2	.....
Dubuque, Iowa.....	1	1	South Bethlehem, Pa.....	1	.....
Everett, Mass.....	1	.....	Toledo, Ohio.....	1	1

**PNEUMONIA—Continued.****City Reports for Week Ended Aug. 21, 1915.**

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Braddock, Pa.....	1	.....	Philadelphia, Pa.....	5	5
Chicago, Ill.....	42	28	Pittsburgh, Pa.....	5	3
Cleveland, Ohio.....	9	5	Rochester, N. Y.....	4	.....
Los Angeles, Cal.....	3	2	San Francisco, Cal.....	8	7

**POLIOMYELITIS (INFANTILE PARALYSIS).****Kansas—Linn County.**

Collaborating Epidemiologist Crumbine reported that during the two weeks ended September 4, 1915, one case of poliomyelitis was notified in Linn County, Kans.

**Arkansas Report for July, 1915.**

Collaborating Epidemiologist Garrison reported that during the month of July, 1915, 1 case of poliomyelitis was notified in Scott County, Ark.

**City Reports for Week Ended Aug. 28, 1915.**

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Akron, Ohio.....	2	1	Hartford, Conn.....	1	.....
Baltimore, Md.....	2	.....	Lowell, Mass.....	1	.....
Brockton, Mass.....	2	.....	New York, N. Y.....	2	.....
Cambridge, Mass.....	1	.....	Portsmouth, Va.....	.....	1
Canton, Ohio.....	1	.....	Rochester, N. Y.....	5	.....
Cleveland, Ohio.....	9	.....	Somerville, Mass.....	1	.....
Detroit, Mich.....	2	.....	Washington, D. C.....	1	.....
Erie, Pa.....	6	.....	Worcester, Mass.....	1	.....

**RABIES.****Massachusetts—Lawrence—Human Case.**

During the week ended August 28, 1915, one fatal case of rabies in man was notified in Lawrence, Mass.

**Nevada—Reno.**

Asst. Surg. Wayson reported by telegraph September 13, 1915, that during the period September 6 to 13, 1915, one case of rabies in man was notified in Reno, Nev., and that of the cases of the disease reported in animals since April, 1915, 10 had been verified as positive by laboratory examination.

**Nevada—Winnemucca—Rabies in Animals.**

Asst. Surg. Wayson reported by telegraph September 11, 1915, that a case of rabies in a coyotes, reported at Winnemucca, Nev., had been proven positive by laboratory examination.

**SCARLET FEVER.**

See Diphtheria, measles, scarlet fever, and tuberculosis, page 2818.

**SMALLPOX.****Kansas.**

Collaborating Epidemiologist Crumbine reported that during the two weeks ended September 4, 1915, cases of smallpox were notified in counties of Kansas as follows: Cherokee, 1; Montgomery, 1; Morris, 2; Reno, 1; Sedgwick, 4, Sumner, 3.

**Arkansas Report for July, 1915.**

Collaborating Epidemiologist Garrison reported that during the month of July, 1915, cases of smallpox were notified in counties as follows: Johnson, 4; Lawrence, 1; Pulaski, 2; Washington, 1, White, 6. Total, 14 cases.

**City Reports for Week Ended Aug. 28, 1915.**

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Charleston, S. C.....	1	.....	Racine, Wis.....	1	.....
Cleveland, Ohio.....	1	.....	Toledo, Ohio.....	14	.....
El Paso, Tex.....	2	.....	Zanesville, Ohio.....	1	.....
Portland, Oreg.....	1	.....			

**TETANUS.****City Reports for Week Ended Aug. 28, 1915.**

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Baltimore, Md.....	.....	1	Oakland, Cal.....	.....	1
Cambridge, Mass.....	1	.....	Pittsfield, Mass.....	.....	1
Manchester, N. H.....	1	1	St. Louis, Mo.....	4	2
New Bedford, Mass.....	1	.....			

**TYPHOID FEVER.****Arkansas Report for July, 1915.**

Place.	New cases reported.	Place.	New cases reported.
<b>Arkansas:</b>		<b>Arkansas—Continued.</b>	
Ashley County.....	6	Lafayette County.....	1
Bradley County.....	1	Lawrence County.....	3
Calhoun County.....	1	Logan County.....	5
Carroll County.....	2	Newton County.....	2
Chicot County.....	21	Osage County.....	2
Conway County.....	4	Phillips County.....	12
Crittenden County.....	1	Polk County.....	8
Dallas County.....	4	Pulaski County.....	13
Drew County.....	2	Saline County.....	3
Faulkner County.....	6	Sebastian County.....	8
Franklin County.....	2	Sevier County.....	1
Greene County.....	4	Sharp County.....	1
Hot Spring County.....	1	St. Francis County.....	2
Independence County.....	1	Stone County.....	3
Izard County.....	2	Washington County.....	2
Jackson County.....	2	Woodruff County.....	1
Jefferson County.....	5		
Johnson County.....	6	Total.....	138



## TYPHOID FEVER—Continued.

City Reports for Week Ended Aug. 28, 1915.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Altoona, Pa.	2		Manchester, N. H.	1	
Atlantic City, N. J.	4		Milwaukee, Wis.	2	
Auburn, N. Y.	3		Mobile, Ala.	3	
Baltimore, Md.	42	2	Muscatine, Iowa.	2	
Beaver Falls, Pa.	1		Nashville, Tenn.	14	
Berkeley, Cal.		1	Newark, N. J.	7	
Binghamton, N. Y.	2		New Bedford, Mass.	4	1
Boston, Mass.	17	3	New Castle, Pa.	3	
Bridgeport, Conn.	1		New Haven, Conn.	13	1
Brockton, Mass.	1		New London, Conn.	1	
Butte, Mont.	2		New Orleans, La.	4	3
Cairo, Ill.		1	Newton, Mass.	1	1
Cambridge, Mass.	3		New York, N. Y.	60	21
Canton, Ohio	1		Norfolk, Va.	1	
Charleston, S. C.	2		Norristown, Pa.	2	
Chattanooga, Tenn.	4		North Adams, Mass.	1	1
Chicago, Ill.		4	Oakland, Cal.	7	
Cincinnati, Ohio.	4	1	Orange, N. J.	1	
Cleveland, Ohio.	27	3	Pawtucket, R. I.		3
Coffeyville, Kans.	1		Philadelphia, Pa.	26	3
Columbus, Ohio.	3		Pittsfield, Mass.	2	
Covington, Ky.	3	1	Plainfield, N. J.	1	
Cumberland, Md.	1		Portsmouth, Va.	1	
Danville, Ill.	1		Providence, R. I.	13	
Dayton, Ohio.	8		Reading, Pa.	3	1
Detroit, Mich.	24	3	Richmond, Va.	20	1
Duluth, Minn.	3	1	Roanoke, Va.	6	
El Paso, Tex.	8		Rochester, N. Y.	7	
Erie, Pa.	3		Rutland, Vt.	2	
Everett, Wash.	3	1	Sacramento, Cal.		1
Fall River, Mass.	4		St. Louis, Mo.	8	1
Fitchburg, Mass.	2		Salt Lake City, Utah.	5	
Galesburg, Ill.		1	San Diego, Cal.		1
Grand Rapids, Mich.	2		San Francisco, Cal.	7	1
Harrisburg, Pa.	2		Somerville, Mass.	2	
Hartford, Conn.	2		South Bethlehem, Pa.	2	
Haverhill, Mass.	1		Springfield, Ill.	1	
Jersey City, N. J.	4		Springfield, Mass.	1	
Kansas City, Kans.	3	1	Stenbenville, Ohio.	17	
La Crosse, Wis.	2		Superior, Wis.		1
Little Rock, Ark.	6		Tacoma, Wash.	6	
Los Angeles, Cal.	5		Toledo, Ohio.	11	2
Lowell, Mass.	4		Washington, D. C.	28	1
Lynchburg, Va.		1	Wheeling, W. Va.	2	
Lynn, Mass.	2		Wilkes-Barre, Pa.	6	1
Malden, Mass.	3		York, Pa.	5	

## DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

## Arkansas Report for July, 1915.

Collaborating Epidemiologist Garrison reported that during the month of July, 1915, 17 cases of diphtheria, 10 cases of measles, and 15 cases of scarlet fever were notified in Arkansas.

## City Reports for Week Ended Aug. 28, 1915.

City.	Population as of July 1, 1915 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.		
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
Over 500,000 inhabitants:											
Baltimore, Md.	584,605	152	20	1	3		9		36	18	
Boston, Mass.	745,139	201	39	3	25	1	30		61	19	
Chicago, Ill.	2,447,045	565	79	10	55	1	29		239	66	
Cleveland, Ohio.	656,975	188	43	2	23		3	1	29	12	
Detroit, Mich.	554,717	168	25	1	1	1	1		28	20	
New York, N. Y.	5,468,190	1,361	154	7	92	4	24		387	139	
Philadelphia, Pa.	1,683,664	440	20	4	34	1	9		152	55	
St. Louis, Mo.	745,988	171	41	3	8		5		29	14	
From 300,000 to 500,000 inhabitants:											
Cincinnati, Ohio.	406,706	113	16	1	8		4		21	19	
Jersey City, N. J.	300,133	87	9		6		5		30	6	
Los Angeles, Cal.	465,367	84	7		4		7		40	21	
Milwaukee, Wis.	428,062	59	1		6	2	6		25	5	
Newark, N. J.	399,000		7		27	1	2		29	9	
New Orleans, La.	366,481	121	18	2	2		1		27	17	
San Francisco, Cal.	1,416,912	137	7				5		30	15	
Washington, D. C.	358,679	96	9		18		4		22	13	
From 200,000 to 300,000 inhabitants:											
Columbus, Ohio.	209,722		7				1		10	3	
Portland, Ore.	272,833	41							4	2	
Providence, R. I.	270,025	85	8		1		5			11	
Rochester, N. Y.	250,747	74		2	1				12	2	
From 100,000 to 200,000 inhabitants:											
Bridgeport, Conn.	118,434	29	4				1		6	2	
Cambridge, Mass.	111,669	29	2		2		9		7	3	
Camden, N. J.	104,349	9	1		2				5		
Dayton, Ohio.	125,509	28	2				4		2	2	
Fall River, Mass.	126,904	37	1				1		5	1	
Grand Rapids, Mich.	125,759	22	2		1				2		
Hartford, Conn.	108,669	28	4		1		2		8	1	
Lowell, Mass.	112,124	42	2							2	
Lynn, Mass.	160,316	21			1		2		4	3	
Nashville, Tenn.	115,978	41	2				1		7	2	
New Bedford, Mass.	114,694	31	1		7		1		5	1	
New Haven, Conn.	147,095		3	1			1		6	4	
Oakland, Cal.	190,803	9	2				3		5		
Reading, Pa.	105,094	39	1		8					1	
Richmond, Va.	154,674	46	1						1		
Salt Lake City, Utah.	113,567	16	1								
Springfield, Mass.	103,216	33			11	1			7		
Tacoma, Wash.	108,094						1		1		
Toledo, Ohio.	187,840	51	3				1		8	7	
Trenton, N. J.	109,212	43	3		1	1			9	3	
Worcester, Mass.	160,523	41	6				1		7	3	
From 50,000 to 100,000 inhabitants:											
Akron, Ohio.	82,958	13	1								
Altoona, Pa.	57,606	11	1				1				
Atlantic City, N. J.	55,806		2	1					1	1	
Bayonne, N. J.	67,582		4						2		
Berkeley, Cal.	54,879	4	1		1					1	
Binghamton, N. Y.	53,082	23	1	1	3				4	4	
Brockton, Mass.	65,746	11	3		3		1		5	1	
Canton, Ohio.	59,139	10	2				1		2		
Charleston, S. C.	60,427	30	2							2	
Chattanooga, Tenn.	58,576		3				1				
Covington, Ky.	56,520	15	2		1		1		2		

<sup>1</sup> Population April 15, 1910; no estimate made.

## DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Contd.

City Reports for Week Ended Aug. 28, 1915—Continued.

City.	Popula- tion as of July 1, 1915 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
From 50,000 to 100,000 inhabit- ants—Continued.										
Duluth, Minn.	91,913		3		1		2		1	3
El Paso, Tex.	51,936	49	3		2		2			
Erie, Pa.	73,798	19	1		1				4	
Harrisburg, Pa.	70,754	19	3							2
Johnstown, Pa.	66,585	16	3	1					1	2
Kansas City, Kan.	96,854		2						2	1
Lancaster, Pa.	50,269		1		1					
Lawrence, Mass.	98,197	31	2						6	3
Little Rock, Ark.	55,158	18	2							
Malden, Mass.	50,067	12	6	1			1			
Manchester, N. H.	76,959	24								
Mobile, Ala.	56,536	10	1						2	2
New Britain, Conn.	52,203								1	1
Norfolk, Va.	88,076		1				1		3	3
Passaic, N. J.	69,010	22								2
Pawtucket, R. I.	58,156	16	3							
Rockford, Ill.	53,761	8								
Sacramento, Cal.	64,806	22	1							4
San Diego, Cal.	51,115	13	7				1		2	2
Somerville, Mass.	85,460	14			1				2	3
South Bend, Ind.	67,030	10			1					1
Springfield, Ill.	59,468	17	1				1			
Wilkes-Barre, Pa.	75,218	22	1		2				3	2
York, Pa.	50,543		1						10	
From 25,000 to 50,000 inhabit- ants:										
Alameda, Cal.	27,031	8								2
Auburn, N. Y.	36,947	8		1					1	
Brookline, Mass.	31,934	3							1	
Butler, Pa.	26,587	7								
Butte, Mont.	42,918								2	4
Chelsea, Mass.	32,452	11	2		2		2		2	1
Chicopee, Mass.	28,688			2						
Cumberland, Md.	25,564	5	1						1	
Danville, Ill.	31,554	7			1				1	2
Davenport, Iowa.	47,127		2							
Dubuque, Iowa.	39,650						11		1	1
East Orange, N. J.	41,155	3							2	
Elgin, Ill.	27,844	3								
Everett, Mass.	38,307	10	1		1					
Everett, Wash.	33,767	9								
Fitchburg, Mass.	41,144	17	6				1		3	
Galveston, Tex.	41,076	7								
Haverhill, Mass.	47,774	16	14	3					3	2
Kalamazoo, Mich.	47,364	14					1		1	1
La Crosse, Wis.	31,522	8	1							
Lexington, Ky.	39,703	11							6	
Lynchburg, Va.	32,385	5								
Madison, Wis.	30,084				1					1
Medford, Mass.	25,737	5	2						1	
Montclair, N. J.	25,550	1							1	
New Castle, Pa.	40,351		2							
Newport, Ky.	31,722	7							1	1
Newport, R. I.	29,631	4							2	
Newton, Mass.	43,085				1				1	
Niagara Falls, N. Y.	36,240	15					1		1	1
Norristown, Pa.	39,833	7			2		1			1
Ogden, Utah.	30,466	5			1					
Orange, N. J.	32,524	12								
Pasadena, Cal.	43,859	13								1
Perth Amboy, N. J.	39,725		2		1					
Pittsfield, Mass.	37,580	16							2	2
Portsmouth, Va.	38,610	7	2							
Racine, Wis.	45,507	10	3		1					
Roanoke, Va.	41,929		11				3			1
Steubenville, Ohio.	26,631	10	2	1			3			
Stockton, Cal.	34,598						1		1	
Superior, Wis.	45,285	8	1							

\* Population Apr. 15, 1910; no estimate made.

## DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Contd.

City Reports for Week Ended Aug. 28, 1915—Continued.

City.	Population as of July 1, 1915 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
From 25,000 to 50,000 inhabitants—Continued.										
Taunton, Mass.	35,957	20			2		1		1	
Waltham, Mass.	30,129	5	2		2		1			1
West Hoboken, N. J.	41,893		1						3	
Wheeling, W. Va.	43,697	11					1			1
Williamsport, Pa.	33,495	11	3							
Wilmington, N. C.	28,264	15	1							2
Zanesville, Ohio.	30,406						1			
From 10,000 to 25,000 inhabitants:										
Ann Arbor, Mich.	14,979	6								1
Beaver Falls, Mass.	13,316						1			
Braddock, Pa.	21,310		1		4				2	
Cairo, Ill.	15,593	5								1
Clinton, Mass.	13,075	1					1			
Concord, N. H.	22,480	7								
Galesburg, Ill.	23,923	9								1
Kearny, N. J.	22,753	5	2						3	
Key West, Fla.	21,437	7								
Melrose, Mass.	17,166	4	2						1	
Morristown, N. J.	13,158	9	1							
Muscatine, Iowa.	17,287	9							1	
Nanticoke, Pa.	22,441	3	1							
Newburyport, Mass.	15,195	7							1	
New London, Conn.	20,771	7							1	
North Adams, Mass.	22,019	6								
Northampton, Mass.	19,846	8							1	
Plainfield, N. J.	23,280	15								
Rutland, Vt.	14,624	6								
Saratoga Springs, N. Y.	12,842	6							1	
South Bethlehem, Pa.	23,522		2							
Wilkinsburg, Pa.	22,361	7								
Woburn, Mass.	15,862	2								

<sup>1</sup> Population April 15, 1910; no estimate made.

## FOREIGN REPORTS.

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### BERMUDA.

#### Dengue Epidemic.

A general epidemic of dengue was reported during the week ended August 28, 1915. Ten cases were notified during this period among the military forces.

### CHINA.

#### Examination of Rats—Shanghai.

During the week ended July 31, 1915, 130 rats were examined at Shanghai. No plague infection was found.

### GERMANY.

#### Cholera.

Cholera has been notified in Germany as follows: During the week ended August 21, 1915, 3 cases with 1 death occurring at Brandenburg on the Oder and at Költseh, and 126 cases with 70 deaths notified among prisoners of war in prison camps; week ended August 28, 1915, 2 cases occurring among civilians at Frankfort on the Oder and several cases notified among prisoners.

### ITALY.

#### Cholera Carriers—Palermo.

Fifteen cholera carriers were reported among prisoners of war at Palermo, Sicily, September 8, 1915.

### TURKEY.

#### Measures Against Piræus.

Arrivals from Piræus were made subject August 11, 1915, to medical inspection at the first Turkish port provided with a sanitary physician.

### ZANZIBAR.

#### Examination of Rats—Zanzibar.

Rats have been examined in Zanzibar as follows: Month of May, 1915, 3,745 rats; month of June, 1915, 4,045. No plague infection was found.



## TYPHUS FEVER.

Reports Received During Week Ended Sept. 17, 1915.<sup>1</sup>

Place.	Date.	Cases.	Deaths.	Remarks.
Dominican Republic: Santo Domingo.....	July 19-31.....		1	
Great Britain: Glasgow.....	Aug. 21.....	1		
Mexico: Mexico City.....	Aug. 28.....	1	1	
Russia: Moscow.....	July 18-24.....	4		
Turkey in Asia: Harput.....	June 1-30.....			Present.
Jaffa.....	July 4-17.....	2	1	

## Reports Received from June 26 to Sept. 10, 1915.

Place.	Date.	Cases.	Deaths.	Remarks.
Austria-Hungary:				
Austria.....	Apr. 25-May 22....	1,212		Mainly among soldiers, prisoners of war, and persons from Galicia; 6 among the civil population, of which 1 in Vienna.
Do.....	June 6-July 3.....	2,046		Mainly among military.
Bosnia-Herzegovina.....	May 2-15.....	64		
Hungary— Budapest.....	May 16-July 17....	18	6	
Azores: Terceira.....	May 23-29.....	1		July 24, 1915; present.
Canada: Ontario— Kingston.....	Aug. 22-28.....	1	1	
Canary Islands: Santa Cruz de Tenerife...	May 16-June 19....		2	
China:				
Antung.....	June 28-July 4.....	1		
Hankow.....	July 4-10.....		1	
Hungtaohotze Station.....	Apr. 19-25.....	1		On Eastern Chinese Ry.
Mukden.....	June 6-July 3.....			Present.
Tientsin.....	do.....		1	
Cuba:				
Santiago.....	July 4-10.....	2	2	
Curacao.....	Aug. 8-14.....	4	1	
Dutch East Indies:				
Java.....	Apr. 25-May 10....	35	7	
Batavia.....	June 6-July 10....	35	7	
Egypt:				
Alexandria.....	May 21-July 22....	138	41	
Cairo.....	May 7-July 1.....	231	225	
Port Said.....	do.....	10	8	
France:				
La Rochelle.....	July 11-17.....	1	1	
Germany.....	May 15-22.....	12		In German soldiers and 1 prison camp employee; among prisoners of war in 14 districts and in Saxony and Hesse.
Do.....	June 6-26.....	33		Among military: Present in prison camps.
Do.....	June 27-July 31....	122		
Aix la Chapelle.....	May 30-June 5.....		1	
Bavaria.....	July 11-17.....	2		
Bremen.....	May 30-June 12....	1	1	
Breslau.....	May 30-June 5.....	5		
Bromberg— Government district...	July 18-24.....	1		
Cassel— Government district...	do.....	1		
Erfurt— Government district...	July 11-17.....	1		
Frankfort— Government district...	July 18-24.....	1		
Hamburg.....	July 25-31.....	1	1	
Konigsberg.....	June 6-12.....	3		
Leipzig.....	do.....		1	
Merseburg— Government district...	July 25-31.....	1		

<sup>1</sup> From medical officers of the Public Health Service, American consuls, and other sources.

## TYPHUS FEVER—Continued.

## Reports Received from June 26 to Sept. 10, 1915—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
<b>Germany—Continued.</b>				
Saxe-Weimar.....	July 11-17.....	10		At Jena.
Saxony.....	July 18-24.....	27		
Stettin— Government district.....	July 25-31.....	1		
<b>Great Britain and Ireland:</b>				
Dublin.....	May 23-July 31.....	7		
Glasgow.....	May 29-Aug. 4.....	2		
Newcastle.....	June 27-July 3.....	1		
<b>Greece:</b>				
Athens.....	June 14-July 19.....		4	
Saloniki.....	May 30-July 17.....		21	
<b>Italy:</b>				
Florence.....	May 1-31.....	5	1	
Turin.....	May 17-23.....	1		
<b>Japan:</b>				
Tokyo.....	June 7-13.....	2		
<b>Mexico:</b>				
Aguascalientes.....	June 21-27.....		1	
<b>Russia:</b>				
Moscow.....	May 2-July 17.....	221	60	
Petrograd.....	May 9-July 10.....	17	4	
Riga.....	Mar. 1-31.....	1	1	
Do.....	June 6-12.....	1		
Vladivostok.....	June 15-July 14.....	2	1	
Warsaw.....				Sept 27-Oct. 31, 1914: Cases, 31; Nov. 1-28, 1914: Cases, 31; deaths, 1. Maximum incidence, Nov. 22-28: Cases, 20; deaths, 1.
<b>Serbia.....</b>	<b>Apr. 27.....</b>			<b>Prevalent.</b>
<b>Spain:</b>				
Madrid.....	June 1-30.....		1	
<b>Switzerland:</b>				
St. Gall.....	July 25-31.....	1		
Zurich.....	May 30-July 10.....	2		
<b>Turkey in Asia:</b>				
Adana.....	May 9-July 10.....			Present.
Beirut.....	May 27-June 2.....	2	1	
Harpur.....	Apr. 1-30.....			Do.
Jaffa.....	Apr. 25-June 25.....	15	8	
Mesina.....	May 9-29.....	2	2	
Tarsus.....	May 9-July 10.....			Do.
Trebizond.....				Oct., 1914-May 22, 1915: 6,000 fatal cases (estimated).
Tripoli.....	May 9-15.....	1	1	

**CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX.****Reports Received During Week Ended Sept. 17, 1915.<sup>1</sup>****CHOLERA.**

Place.	Date.	Cases.	Deaths.	Remarks.
Borneo:				
Sandakan.....	July 18-24.....	6	4	Within jail limits.
Germany:				
Brandenburg on the Oder..	Aug. 15-21.....	2		126 cases with 70 deaths among prisoners. Present among prisoners.
Frankfort on the Oder.....	Aug. 22-28.....	2		
Kölnsch.....	Aug. 15-21.....	1		
India:				
Bombay.....	July 25-31.....	1	1	
Madras.....	do.....	2		
Rangoon.....	July 18-24.....	2	1	
Straits Settlements:				
Sumatra, island—				
Toba district.....	Apr. 12-June 26...	159	110	

**PLAGUE.**

China:				
Amoy.....	July 4-17.....		95	Estimated.
Hongkong.....	July 18-24.....	2	2	
Dutch East Indies:				
Surabaya.....	July 4-10.....	3	3	
Egypt:				
Fayoum, Province.....	July 30-Aug. 12...	2		
Port Said.....	July 30-Aug. 5....	1		
India:				
Bassein.....	July 11-17.....		4	
Bombay.....	July 25-31.....	7	5	
Karachi.....	do.....	1	1	
Mandala'y.....	July 11-17.....		3	
Rangoon.....	July 18-24.....	13	12	
Turkey in Asia:				
Bagdad.....	July 6-26.....	12	8	

**SMALLPOX.**

Austria-Hungary:				
Prague.....	Aug. 1-7.....	3		
Vienna.....	July 25-31.....	3	1	
Canada:				
Ontario—				
Peterborough.....	July 10-17.....		1	
Ceylon:				
Colombo.....	July 18-24.....	31		
China:				
Amoy.....	July 4-17.....			Present.
Shanghai.....	June 27-July 3....	1		
Dutch East Indies:				
Java.....	July 4-17.....	29	1	
Batavia.....	do.....		1	
India:				
Bombay.....	July 25-31.....	9	5	
Karachi.....	do.....	1		
Madras.....	do.....	6	5	
Rangoon.....	July 18-24.....		2	
Italy:				
Turin.....	Aug. 16-22.....	1		
Mexico:				
Vera Cruz.....	Aug. 9-22.....	12	6	
Spain:				
Valencia.....	Aug. 15-21.....	8		
Turkey in Asia:				
Beirut.....	July 18-31.....	14	7	
Haifa.....	July 12-25.....	3	1	

<sup>1</sup> From medical officers of the Public Health Service, American consuls, and other sources.

**CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.****Reports Received from June 26 to Sept. 10, 1915.****CHOLERA.**

Place.	Date.	Cases.	Deaths.	Remarks.
<b>Austria-Hungary:</b>				
Austria.....	May 2-July 17.....	3,433	1,141	July 3-17, 1915: 5 cases in Galicia.
Vienna.....	May 9-15.....	9	3	Among soldiers and prisoners.
Trieste.....	June 27-July 3.....	1		
Bosnia-Herzegovina.....	Apr. 25-July 3.....	216	71	202 cholera carriers.
Croatia-Slavonia.....	May 3-July 19.....	558	207	14 among soldiers.
Hungary.....	Apr. 26-July 11.....	1,179	518	May 16-23: 5 additional cases notified.
Budapest.....	June 28-July 10.....	2		
<b>Ceylon:</b>				
Colombo.....	Apr. 25-May 22.....	8	1	
<b>China:</b>				
Hongkong.....	May 2-8.....	1	1	
<b>Dutch East Indies:</b>				
Java—				
Batavia.....	Apr. 25-July 10.....	58	52	Sept. 3, 1915: Epidemic.
<b>Germany:</b>				Among soldiers: 15 cases, 1 death.
Do.....	July 24-31.....	215	25	In prison camps.
Berlin.....	July 18-24.....	1		Among soldiers.
Berlitz.....	do.....	1		Do.
Breslau.....	July 18-31.....	2		Do.
Bromberg.....	July 25-31.....	1		Do.
Cannstatt.....	do.....	1		Do.
Danzig.....	July 18-24.....	1		Do.
Furstenwalde and Költzsch.....	Aug. 8-14.....	4	4	
Hanover.....	July 25-31.....	1		Do.
Jagerndorf.....	June 13-July 2.....	1		
Landsberg.....	July 25-31.....	1		Do.
Leipzig.....	do.....	1		Do.
Patschkau.....	July 18-24.....	1		Do.
Posen.....	July 25-31.....	1		Do.
Rosenberg.....	June 13-July 2.....	1		
Sachsenhausen.....	do.....	1	1	
Schneidemühl.....	July 25-31.....	1		Do.
Silesia.....	July 3-17.....	5		
Slaventzitz.....	June 13-July 2.....	1		
Sommerfeld.....	July 18-24.....	1		Do.
Spandau.....	July 25-31.....	1		Do.
Striegan.....	July 18-24.....	1	1	Do.
<b>Government districts—</b>				
Breslau.....	June 13-July 24.....	4		
Frankfort on the Main.....	do.....	1		
Gumbinnen.....	do.....	1		
Königsberg.....	do.....	2		
Leignitz.....	do.....	1		
Marienwerder.....	do.....	12		
Oppeln.....	do.....	5		
Potsdam.....	do.....	3		
Wiesbaden.....	do.....	1		
<b>India:</b>				
Akyab.....	May 16-29.....		2	
Bassein.....	Apr. 18-July 10.....		28	
Bombay.....	June 6-July 24.....	4	3	
Calcutta.....	Apr. 25-July 10.....		187	
Madras.....	May 2-July 24.....	6	6	
Pegu.....	July 4-10.....		1	
Rangoon.....	Apr. 24-July 17.....	11	11	
<b>Indo-China:</b>				Jan. 1-31, 1915: Cases, 294; deaths, 178.
<b>Provinces—</b>				
Anam.....	Jan. 1-Feb. 28.....	9	5	
Cochin China.....	do.....	621	297	
Laos.....	Feb. 1-28.....	46	21	
Tonkin.....	Jan. 1-Feb. 28.....	84	39	
Saigon.....	May 2-July 10.....	1,190	723	
<b>Italy:</b>				
Leghorn.....	Aug. 11.....	1		
Venice.....	do.....	3		
<b>Russia:</b>				
Moscow.....	June 6-12.....	75	14	
Serbia.....	June 25-July 2.....	2		
<b>Siam:</b>				
Bangkok.....	Apr. 19-July 10.....		6	
<b>Straits Settlements:</b>				
Singapore.....	May 9-June 12.....	2	1	

**CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**

Reports Received from June 26 to Sept. 10, 1915—Continued.

**YELLOW FEVER.**

Place.	Date.	Cases.	Deaths.	Remarks.
Brazil: Bahia.....	July 11-17.....	1	1	

**PLAGUE.<sup>1</sup>**

Azores:				
Terceira, island.....	July 25.....			Present.
Bahrein, island.....	Apr. 1-30.....			Do.
Ceylon:				
Colombo.....	May 9-29.....	3	3	
China:				
Amoy.....	May 2-June 5.....			Present. Present in Sio-Khe Valley, 60 miles inland.
Do.....	June 13-19.....			Increasing.
Do.....	June 20-26.....			40 deaths daily (estimated). At Kulangsu, international settlement, 1 case.
Do.....	June 27-July 10.....			Present.
Hongkong.....	May 9-July 17.....	57	51	
Cuba:				
Habana.....	Aug. 15.....	1		
Brazil:				
Bahia.....	June 20-July 10.....	4	3	
Dutch East Indies:				
Java.....				Jan. 1-Feb. 25, 1915: Cases, 2,094; deaths, 1,864.
Do.....	Mar. 12-July 10.....	2,115	1,015	
Kediri residency.....	do.....	37	32	
Madison residency.....	do.....	5	5	
Paseroean residency.....	do.....	29	26	
Surabaya residency.....	do.....	14	14	
Suarakarta residency.....	do.....	2	2	
Surabaya.....	Apr. 18-July 3.....	20	19	
Ecuador:				
Guayaquil.....	May 1-31.....	1		
Egypt:				
Alexandria.....	May 21-27.....		1	Jan. 1-May 20, 1915: Cases, 93; deaths, 48. Jan. 1-July 15, 1915: Cases, 188; corresponding period, 1914: Cases, 157.
Assiout, province.....	May 14-June 3.....	7	2	
Fayoum, province.....	May 14-July 15.....	50	9	
Galloubek, province.....	May 14-27.....	1		
Minieh, province.....	May 14-July 15.....	14	5	
Port Said.....	May 28-July 15.....	9	3	
Greece:				
Zante.....	Aug. 1-11.....	12	13	
India:				
Bassein.....	Apr. 18-July 10.....		61	
Bombay.....	May 2-July 24.....	161	144	
Calcutta.....	Apr. 25-July 3.....		59	
Henzada.....	May 2-8.....	1		
Karnachi.....	May 2-July 24.....	618	333	
Mandalay.....	Apr. 25-July 3.....		5	
Moulmein.....	May 23-July 3.....		8	
Myingyan.....	Apr. 5-17.....		1	
Pegu.....	Apr. 18-May 1.....		5	
Rangoon.....	Apr. 18-July 17.....	179	145	Apr. 1-May 31, 1915: Cases, 94; deaths, 92.
Toungoo.....	Apr. 25-May 1.....		38	
Indo-China:				
Saigon.....	May 9-June 19.....	10	6	Jan. 1-31, 1915: Cases, 73; deaths, 58.
Provinces—				
Anam.....	Jan. 1-Feb. 28.....	62	54	
Cambodia.....	do.....	37	34	
Cochin China.....	do.....	40	19	
Laos.....	Feb. 1-28.....	20	20	
Japan:				
Taiwan Island—				
Kagi.....	May 30-July 3.....	7	7	
Tokyo.....	May 31-Aug. 8.....	9	5	
Mauritius:				
June 14.....		1		
Persia:				
Mohammerah.....	Apr. 10-June 1.....	3		
Peru:				
Callao.....	May 3-9.....	1		
Lima (city).....	do.....	1		
Mollendo.....	do.....	1		

<sup>1</sup>The report of a case of plague at Pauhau, Hawaii, June 29, 1915, and heretofore published in this table, was an error. Bacteriological examinations made after the death of the patient proved the disease not to be plague.

**CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.****Reports Received from June 26 to Sept. 10, 1915—Continued.****PLAGUE—Continued.**

Place.	Date.	Cases.	Deaths.	Remarks.
Peru—Continued.				
Salaverry.....	Apr. 26-May 27....	2		May 30. Vicinity.
Trujillo.....	May 3-9.....	2		May 30, 7 cases in hospital.
Siam:				
Bangkok.....	July 4-10.....		1	
Straits Settlements:				
Singapore.....	Apr. 25-June 5....	4	1	
Turkey in Asia:				
Bagdad.....	May 2-July 5.....	756	566	
Chios, island.....	Aug. 6.....			Present.
Union of South Africa:				
Cape Province—				
Tarka, district.....	June 2-16.....	2	1	
Wodehouse, district.....	June 5.....	2	2	At Dordrecht.
Zanzibar:				
Zanzibar.....	Mar. 1-31.....		1	

**SMALLPOX.**

Australia:				
New South Wales—				
New Castle District.....				June 10-July 24: Cases, 13.
Cessnock.....	June 10-July 1....	4		
Hamilton.....	July 16-22.....	1		
Kurri Kurri.....	May 26-July 22....	8		
Plattsburg.....	July 16-22.....	1		
Standford Morthyr.....	June 25-July 24....	1		
Victoria—				
Melbourne.....	Apr. 20.....	1		At Point Nepean quarantine station, from S. S. Lord Derby from Rangoon.
Western Australia—				
Fremantle.....	Apr. 27.....	1		At Woodmans Point quarantine station, from S. S. City of Baroda from Calcutta via Colombo.
Austria-Hungary:				
Austria.....	May 2-July 10....	3,568		
Dalmatia, Province.....	May 2-8.....	1		
Vienna.....	May 2-July 17....	33	8	Aug., 1914-May 8, 1915: Cases, 1,487; deaths, 316. May 9-15, 1915: Cases, 28. June 6-12: Cases, 13.
Hungary—				
Budapest.....	do.....	291	1	
Brazil:				
Rio de Janeiro.....	Apr. 18-July 10....	114	34	
Rio Grande do Sul.....	Sept. 2.....			Epidemic.
Canada:				
Alberta—				
Edmonston.....				Epidemic 30 miles south closed Aug. 14, 1915: Cases, 100 (estimated).
Ontario—				
Hamilton.....	June 1-30.....	2	4	
Sarnia.....	June 13-19.....	1		
Toronto.....	June 6-Aug. 7.....	7		
Quebec—				
Montreal.....	June 13-Aug. 7....	11		
Sherbrooke.....	June 1-30.....		1	
Canary Islands:				
Santa Cruz de Tenerife.....	July 18-21.....		1	
Ceylon:				
Colombo.....	May 2-July 17....	27	10	
China:				
Chungking.....	May 23-June 19....			Present.
Foochow.....	May 9-22.....			Do.
Harbin.....	May 3-9.....	1		
Hongkong.....	May 9-July 3.....	8	5	
Manchuria Station.....	June 21-27.....	2		Eastern Chinese Railway.
Nanking.....	June 20-July 21....			Present.
Shanghai.....	May 9-June 25....	4	5	Natives.
Tientsin.....	May 16-22.....		1	
Dutch East Indies:				
Java.....	Apr. 18-July 10....	572	149	
Batavia.....	Apr. 25-June 19....		29	Do.
Egypt:				
Alexandria.....	May 21-July 15....	41	14	
Cairo.....	Apr. 30-July 1....	16	6	



**CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**

Reports Received from June 26 to Sept. 10, 1915—Continued.

**SMALLPOX—Continued.**

Place.	Date.	Cases.	Deaths.	Remarks.
Germany.....				Total, May 16-July 3, 1915: 9 cases.
Hamburg.....	June 6-12.....	1		
Government districts—				
Allenstein.....	June 13-19.....	1		
Arnsberg.....	do.....	1		
Breslau.....	June 20-July 3.....	1		
Danzig.....	June 13-July 31.....	3		
Gumbinnen.....	May 23-29.....	2		
Marienwerder.....	May 23-July 31.....	3		
Merseburg.....	June 20-July 3.....	1		
Oppeln.....	May 16-July 31.....	9		
Posen.....	May 30-June 5.....	3		
Potsdam.....	June 13-July 3.....	3		
Great Britain:				
Bristol.....	Mar. 21-May 22.....	29	7	1 from vessel from Bombay. Maximum incidence, Apr. 4-17: Cases, 22; deaths, 2.
London.....	May 30-June 12.....	3		
Greece:				
Saloniki.....	May 23-29.....		1	
India:				
Bassein.....	May 2-8.....		1	
Bombay.....	May 2-July 21.....	203	109	
Calcutta.....	Apr. 25-July 10.....		253	
Kanachi.....	May 2-July 17.....	24	4	
Madras.....	May 2-July 24.....	20	10	
Moulmein.....	May 23-29.....		1	
Pegu.....	Apr. 18-June 12.....	1	1	
Rangoon.....	Apr. 18-July 17.....	119	53	May 1-31, 1915: Cases, 37; deaths, 14.
Indo-China:				
Provinces—				
Anam.....	Jan. 1-31.....			Present.
Cambodia.....	Jan. 1-Feb. 28.....	32	5	
Cochin China.....	Jan. 1-31.....	12		
Laos.....	Feb. 1-28.....	6		
Tonkin.....	Jan. 1-Feb. 28.....	66	12	
Saigon.....	May 23-July 10.....	2	2	
Italy:				
Milan.....	May 1-31.....	1		
Japan:				
Taiwan, island.....	May 23-29.....	1		
Mexico:				
Acapulco.....	July 14-20.....		1	
Aguascalientes.....	June 7-Aug. 8.....		14	
Frontera.....	May 23-July 31.....	115	41	
Matatlan.....	June 23-July 13.....		3	
Monterey.....	June 14-Aug. 1.....	9		
Progreso.....	June 6-July 24.....	7	1	
Salina Cruz.....	June 1-20.....	4	1	
Vera Cruz.....	June 7-Aug. 8.....	83	43	Soldier from San Geronimo.
Portugal:				
Lisbon.....	May 23-July 17.....	23		
Russia:				
Moscow.....	May 2-15.....	19	5	
Petrograd.....	May 8-July 17.....	315	123	
Riga.....	May 9-July 17.....	61		Mar. 1-31, 1915: Cases, 89; deaths, 22.
Vladivostok.....	May 23-June 4.....	1		Sept. 27-Oct. 31, 1914: Cases, 51; deaths, 16. Nov. 1-28, 1914: Cases, 70; deaths, 23.
Warsaw.....				
Serbia.....	Apr. 21-May 3.....	356		
Spain:				
Madrid.....	June 1-July 31.....		7	
Seville.....	May 1-June 30.....		7	
Valencia.....	May 30-Aug. 1.....	74	10	
Straits Settlements:				
Penang.....	Apr. 25-May 15.....	6	2	
Singapore.....	May 23-29.....	1		
Switzerland:				
Basel.....	May 16-July 3.....	18		
Turkey in Asia:				
Bagdad.....	May 2-8.....			Present.
Beirut.....	May 16-July 17.....	64	25	
Haifa.....	May 3-June 20.....	6		
Jaffa.....	May 9-29.....	2		
Mersina.....	May 30-June 5.....	1		
Tripoli.....	May 2-8.....			Do.

# SANITARY LEGISLATION.

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## COURT DECISIONS.

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### WISCONSIN SUPREME COURT.

#### Health Officer—Selection by Lot Invalid.

MEANY *v.* STAEHLE, 152 N. W. Rep., 165. (Apr. 13, 1915.)

The board of health of the city of Manitowoc was equally divided in choosing a health officer. They decided the question by drawing lots, but the successful candidate was never formally elected. The court held that the selection by lot conferred no right to the office.

The appellant claims to be the health officer of the city of Manitowoc, and sues to restrain the defendant from interfering with the appellant's alleged possession of the office of health officer and the discharge of the duties of health officer by appellant. The court below denied the application of appellant for a temporary injunction restraining the defendant and others from interfering with appellant's alleged possession of the office of health officer, and the discharge of the duties of such office. The motion for injunction was heard on the pleadings and affidavits.

KERWIN, J. (after stating the facts as above). No formal findings of fact were made in the case, but the learned trial court rendered a carefully prepared decision in writing, which is in the record, setting forth the material established facts and conclusions arrived at.

The charter of the city of Manitowoc empowers the board of aldermen to take such measures for the public health as it may deem proper, and also authorizes such board "to establish and regulate boards of health." On the 13th day of May, 1895, the city passed an ordinance which provides that there shall be appointed annually, as one of the standing committees of the council, three of its members to be known as a sanitary committee, and who, together with the city physician, appointed by the council, shall constitute a board of health of the city, and shall have and exercise all powers conferred by law, etc.; that the chairman of said committee shall be ex officio president of said board; that said board shall be organized by electing a secretary, who shall be one of their own number, and the board shall also elect a health officer who shall be a practicing physician in good standing, resident of said city, and shall fix his salary, and he shall have the power conferred by law, etc.; that at all times since the enactment of said ordinance the board of health has been constituted annually in accordance with the provisions of said ordinance, and pursuant thereto the health officer has been chosen annually by the board up to the time of the election in controversy. Under said ordinance defendant was elected or chosen health officer by said board on April 15, 1913, for the ensuing year, and qualified, and since has discharged the duties of the office up to the time of this disputed election, and still continues to do so, at least in part, and claims to be such health officer holding over after the expiration of his term on the ground that his successor has not been chosen. Defendant has been paid by the city the salary of the office for May, 1914, and plaintiff's demand for payment of salary has not been complied with by the city.

The city charter provides for certain designated city officers, and also for "such other officers as the board of aldermen may deem necessary to appoint." The charter specifies which officers shall be elected by the people and which appointed by the mayor and confirmed by the council, and provides that all other officers shall be appointed by the council. The city physician is one of the officers designated by the charter as appointed by the council. The charter further provides that certain officers named shall hold their offices for two years and until their successors are elected and qualified, and that "all other officers either elected or appointed shall hold their respective offices for one year and until their successors are elected and qualified. \* \* \*." The office of health officer is not mentioned in the city charter and is only referred to, if at all, under the head of such "other officers" as the council "may deem necessary to appoint." The health officer has never been elected or appointed by the council since the passage of the ordinance of May 13, 1895, since which time the health officer has been chosen by the board of health in accordance with the ordinance.

The board of health met April 22, 1914, organized by the election of a president and secretary, and proceeded to vote by ballot for a health officer for the ensuing year. On the first ballot plaintiff received one vote, the defendant one, and Dr. Westgate two. The minutes show that thereafter other ballots were taken, resulting in a tie vote, Dr. Westgate receiving two votes and the plaintiff two. Whereupon it was suggested to determine the election by drawing lots, which resulted in the plaintiff being declared elected. Thereupon plaintiff appeared before the board and was informed by its members, or some of them, that he had been elected health officer, and received some instructions from members of the board relating to services which they wished him to perform as such health officer. On the next day he took and filed his official oath and entered upon the discharge of the duties of the office in the belief or under the assumption that he had been elected, and demanded the books and records of the office from the defendant, and the same, or some of them, were delivered to him by defendant within a day or two in the belief on defendant's part that plaintiff had been elected to succeed him in the office. Some of the apparatus, however, belonging to the office was not delivered by defendant to plaintiff and has been retained by defendant.

On April 24, 1914, plaintiff caused to be published a notice stating that he had assumed the office of health officer. On April 28, 1914, the board of health met, and the minutes of the previous meeting were amended by striking out the words, "It was finally decided to determine the election by drawing lots, which resulted in Dr. Meany being chosen," and inserting in lieu thereof the following:

It was suggested that the board draw lots to settle the two votes for Dr. F. J. E. Westgate and Dr. J. E. Meany for health officer. Without any motion or formal action a ballot bearing the name of Dr. J. E. Meany and a ballot bearing the name of Dr. F. E. Westgate were both put into a hat, and a ballot bearing the name of Dr. Meany was drawn therefrom. The chairman suggested that formal action be taken to elect Dr. Meany, and no action was taken other than the statement of the chairman to the effect that "I suppose Dr. Meany is elected," to which there was no reply made by any member.

All the members of the board voted in favor of the foregoing amendment, and it was adopted, and the court below found that it was presumably a correct statement of the facts recited. At the same meeting a vote that the secretary cast the "unanimous ballot" for plaintiff for health officer was declared lost. On April 29, 1914, defendant, as health officer, caused to be published a notice over his signature directing property owners to remove garbage from their premises.

The learned trial court in its decision found the foregoing facts undisputed. Some other facts are also set forth in the opinion which we do not deem necessary to recite here.

It is obvious from what has been said that the question is presented whether the plaintiff is de facto health officer in possession of the office and in the discharge of his duties, and therefore entitled to a temporary injunction restraining the defendant from interfering with his possession of the office and the performance of its duties pending the action.

The learned trial court held against the plaintiff's contention, and further held that the defendant had in his possession "most, if not all, of the records, papers, and equipment of the office, having caused to be taken away from plaintiff's office in his absence therefrom some or all of those records and papers which defendant had previously delivered to plaintiff." This finding is supported by the record.

It further appears from the established facts and the decision of the trial court that the city does not provide any room to be occupied as the office of the health officer, and that each of the parties to this controversy used for that purpose his private office in which he conducted his practice as a physician. It further appears from the record that in so far as the word "office" means the place where certain business of the health officer is transacted, it can not be said that either claimant is in actual possession of the office to the exclusion of the other. The court below found upon sufficient showing that:

In so far as actual possession of the official books, records, papers, and equipment serve to indicate possession of the office in the legal sense, such indicia tend to show that such possession was in defendant rather than in plaintiff when the action was begun, and also at the time of the hearing.

The court below also found that upon the established facts and the law governing these facts the plaintiff was not entitled to an injunction, and we think it clear from the record that the court was right in so finding. (*Ekern v. McGovern*, 154 Wis., 220, 142 N. W., 595, 46 L. R. A. (N. S.), 796; *Ward v. Sweeney*, 106 Wis., 44, 82 N. W., 169.)

It is argued by counsel for respondent that the board of health had no power to choose the health officer; that that function is conferred upon the common council by section 1411, Statutes. A very interesting argument is made upon this proposition. We need not and do not decide it. The court below held that the board had no power to appoint a health officer, because section 1411, Statutes, only leaves power to provide for election of health officers in cities whose charters make provision for the election of boards of health and a health officer, and that the city charter of Manitowoc provides only for a board of health, not for a board of health and a health officer.

The court below, while holding that it was not necessary to consider the merits of the case, held that the facts being all before the court, it could under the decisions of this court proceed to determine the ultimate question as to who was entitled to the office. (*St. Hyacinth Congregation v. Borucki*, 141 Wis., 205, 124 N. W., 284; *Ekern v. McGovern*, supra.) Assuming without deciding that the board of health under the ordinance had power to elect a health officer, it is clear that the plaintiff was not elected. The attempted determination by lot as to who was elected conferred no right to the office upon the plaintiff. The board never determined to elect or appoint a health officer by lot. If it had the power to change its former rule to elect or appoint by ballot and elect by lot (a point we do not decide), the record heretofore cited shows that it failed to do so. The plaintiff received neither a majority nor plurality of the votes, hence was not elected or appointed, even if the board had power to elect or appoint. (*State ex rel. Burdick v. Tyrrell*, 158 Wis., 425, 149 N. W., 280; 1 *Dillon Municipal Corp.* (4th ed.), sec. 278; *Lawrence v. Ingersoll*, 88 Tenn., 52, 12 S. W., 422, 6 L. R. A., 308, 17 Am. St. Rep., 870; *Commonwealth v. Allen*, 128 Mass., 308; *Launtz v. People*, 113 Ill., 137, 55 Am. Rep., 405.) It is not intended by this decision to foreclose trial of title to the office, but on the record before us the plaintiff has shown no title.

On any theory of this case upon the undisputed facts in the record it is clear that the plaintiff was neither a de facto nor a de jure health officer.

The order appealed from is affirmed.

## STATE LAWS AND REGULATIONS PERTAINING TO PUBLIC HEALTH.

### DISTRICT OF COLUMBIA.

#### **Rabies—Muzzling of Dogs Required. (Order Comrs., Aug. 3, 1915.)**

Ordered: That, under the provisions of section 7 of the act of Congress approved June 19, 1878, entitled "An act to create a revenue in the District of Columbia by levying a tax upon all dogs therein, to make such dogs personal property, and for other purposes," the commissioners hereby give notice that every dog in said District shall, for a period of one year from and after the 10th instant, wear a good and substantial muzzle, securely put on, so as to prevent it from biting or snapping; and any dog going at large during said period without such muzzle shall be taken up by the pound-master and impounded.

### HAWAII.

#### **Sanitary Code—Commission Appointed to Compile. (Act 178, Apr. 26, 1915.)**

SECTION 1. A commission of five persons, who shall serve without pay, to be designated as the Sanitary Code Commission, and who shall be appointed by the governor in the manner prescribed in section 80 of the organic act, is hereby constituted and authorized to compile the sanitary code of the Territory of Hawaii for the promotion and protection of the public health, preservation of life, and suppression and prevention of contagious and infectious diseases, embracing therein all matters and subjects to which, and so far as, the powers and authority of the Territorial board of health and of health departments of any municipal or county government of the Territory now extends, or to which such powers and authority may hereafter be extended.

SEC. 2. Said sanitary code shall be submitted to the governor not later than January 1, 1917, and presented by him to the legislature of 1917.

#### **Store at Leper Settlement—Appropriation for Operation and Maintenance. (Act 15, Mar. 22, 1915.)**

SECTION 1. To enable the board of health to operate and maintain the "Kalaupapa store," situated at Kalaupapa, Molokai, the sum of \$10,000 is hereby appropriated as a special fund to be deposited in the Territorial treasury and to be a continual deposit, subject to the control of the board of health through its president, to be used from time to time in operating and maintaining the said "Kalaupapa store." All moneys withdrawn from such fund for such purposes shall be reimbursed or restored thereto, so far as may be, out of any moneys received or collected from the sales made in said "Kalaupapa store" and shall then be available for further use.

SEC. 2. This act shall take effect April 1, 1915.

#### **Board of Health—Appropriations. (Act 175, Apr. 26, 1915.)**

SECTION 1. The following sums are hereby appropriated, for the objects hereinafter expressed, for the biennial period ending June 30, 1917, out of moneys in the treasury received from the general revenues:

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## BOARD OF HEALTH.

## General:

President (\$325).....	\$7,800
Secretary, clerks, stenographers, janitors, messengers, expenses.....	26,000
	<hr/> \$33,800

## Sanitation:

Sanitary engineer (\$250).....	6,000
Chief sanitary inspector, Oahu (\$225).....	5,400
Chief sanitary inspector, Hawaii (\$225).....	5,400
Chief sanitary inspector, Maui (\$150).....	3,000
Chief sanitary inspector, Kauai (\$150).....	3,000
District sanitary inspector, Oahu (\$100).....	2,400
District sanitary inspectors, Hawaii.....	4,800
District sanitary inspector, Maui (\$90).....	2,160
District sanitary inspector, Kauai (\$90).....	2,160
Sanitary inspectors, Honolulu.....	25,080
Sanitary inspectors, Hilo.....	5,760
Clerk, Hawaii (\$100).....	2,400
	<hr/> 68,760
Expenses, Territory.....	12,500

## Pure food:

Food commissioner and assistants.....	12,600
Expenses.....	3,000
	<hr/> 15,600

## Bacteriological bureau:

Bacteriologist and pathologist, Oahu (\$200).....	4,800
Bacteriologist and specialist, Hawaii (\$200).....	4,800
Laboratory assistants.....	4,000
Laboratory equipment and expenses.....	2,400
	<hr/> 16,000

## Pay of Government physicians:

Provided, however, that no salary shall be allowed or paid unless the physicians employed or appointed in the several districts to which they are appointed shall treat the indigent sick free of charge in such district or districts as the case may be to which they are appointed.

Hawaii.....	18,480
Maui and Molokai.....	9,960
Kauai.....	6,480
Oahu.....	6,600
	<hr/> 41,520

Medical supervision and treatment of school children.....	5,000
Quarantine and medical service and expenses.....	45,000
Rat campaign.....	20,000
Mosquito campaign.....	25,000
Prevention and cure of tuberculosis.....	120,000

## Repairs, maintenance, and equipment, quarantine stations:

Honolulu.....	1,000
Hilo.....	1,500
	<hr/> 2,500

## Erection, equipment, maintenance, morgue, Hilo, to be built under direction of the board of health.

3,500

## Care of lepers and their children:

Medical supplies and equipment.....	\$45,000
General pay roll.....	65,000
Segregation, hospitals, and maintenance.....	200,000
Amusements.....	1,440
Sheriff and police.....	2,880
New buildings, Kalaupapa.....	12,000
	<hr/> 323,320

## Homes for nonleprous children:

Kapiolani Girls' Home.....	22,500
Pay roll.....	\$6,000
Maintenance.....	14,000
Nurses' cottage and furnishing.....	2,500
Kalihi Boys' Home.....	19,000
Pay roll.....	7,000
Maintenance.....	12,000
	<hr/> 41,500



Insane Asylum:	
Superintendent (\$225).....	\$5,400
Pay rolls.....	50,500
Maintenance.....	54,000
	<hr/> \$109,900
Sanatorium:	
Pay roll and maintenance.....	12,000
	<hr/> \$98,900

**Mongoose—Appropriation for Payment of Bounty on. (Act 82, Apr. 15, 1915.)**

SECTION 1. The sum of \$2,500, or so much thereof as may be necessary, is hereby appropriated from the general revenues of the Territory to be known as the "mongoose fund," and is to be used for the payment of bounties on mongoose as contained in chapter 39 of the Revised Laws of Hawaii of 1915.

**Insanitary Land—Improvement of. (Act 190, Apr. 27, 1915.)**

SECTION 1. A new section is hereby added to the Revised Laws of Hawaii, 1915, to be known as section 976A, and to read as follows:

"SEC. 976A. *Maps and plans.*—If the board shall in any case recommend a system of drainage or of filling and drainage, the superintendent of public works shall, upon receipt of such notice, prepare a map of the land so reported upon by the board of health and to be so drained, or filled and drained, which land shall constitute a drainage district; said map shall show the district to be so drained, or filled and drained, the location and the size of each parcel or lot therein, a list of all known owners and occupants of such lots, the lots or parcels either within or without such drainage district through which rights of way for drains or ditches for draining said district are necessary, the amount of land necessary to be taken for such drains or ditches and for the banks thereof, a description of the same, an estimate of the value of said lands so sought to be taken for such rights of way, and of the damages sustained by any person or corporation by reason of such appropriation irrespective of any benefit to be derived by such land owners by reason of the construction of such improvements, which estimates shall be made respectively as to each person or corporation through whose land said rights of way are sought to be appropriated; such map shall also show the extent and location of the proposed drains or ditches, the width, depth and slope of the sides thereof, an estimate of the total cost of the system of drainage in and for said district, including therein among other things the cost of acquiring the necessary rights of way as aforesaid and of making ditches; estimates of the cost, respectively, of the filling of each lot or parcel of land in said district; and the estimate of the cost to be apportioned to and assessed against each lot or parcel of land in said district for the drainage as aforesaid of such lot or parcel, the apportionment to be as hereinafter required.

"If the board of health shall recommend only that the land be filled, such map shall, so far as practicable, show the present heights of each parcel, the height to be filled to, the approximate amount of fill required for each parcel and the estimated cost thereof.

"The superintendent of public works may, in his discretion, embody any of the information herein required in a statement to accompany the appropriate map instead of placing the same upon the map."

SEC. 2. Section 977 of the Revised Laws of Hawaii, 1915, is hereby amended to read as follows:

"SEC. 977. *Notice to owners to improve.*—It shall be the duty of the superintendent of public works upon the receipt of such notice to cause a copy of the same to be served in the manner prescribed in section 978 upon the owner or occupant of such land. The superintendent shall also notify each owner or occupant that a detailed statement and map or plan of the proposed improvement is on file in his office accessible to such owner or occupant. Said superintendent shall at the same time and in the same man-

ner serve notice that, in case of failure to begin work upon such improvements within 20 days, or such further time in special cases as to said superintendent may seem reasonable, and to complete such work within a reasonable time in such notice designated, such work or so much thereof as may remain undone will be done by the Territory at the cost of the lands benefited thereby."

SEC. 3. Section 979 of the Revised Laws of Hawaii, 1915, is hereby amended to read as follows:

"SEC. 979. *Appeal*.—During the period of 20 days, or such further time in special cases as is specified in the notice given pursuant to the provisions of section 977, any owner or occupant of land sought to be improved, his attorney or agent, may file an appeal from the decision of the board of health condemning the land as deleterious to the public health or from its decision or the order of the superintendent of public works as to the nature and extent of the improvements to be made, including the size, character, and location of any drains or ditches, and within 20 days after written demand by the superintendent of public works on the owner or occupant of any land in a drainage district improved by drainage under this chapter, for the payment of the cost of any such drainage, such owner or occupant, his attorney or agent, may file an appeal from the order of the said superintendent apportioning the cost of such drainage to be borne by his land. All appeals shall be filed with the superintendent of public works and the superintendent shall transmit them to the circuit court of the circuit wherein the land is situated."

SEC. 4. Section 980 of the Revised Laws of Hawaii, 1915, is hereby amended to read as follows:

"SEC. 980. *Hearing, decision*.—Said court shall, upon receiving any such appeal from the superintendent of public works, appoint three disinterested persons who shall sit as a board to hear and determine such appeals. They shall have power to determine whether or not the land is deleterious to the public health and whether the improvements of the nature designated in such notice are required, and if such improvements are not required, what, if any, improvements are required in order to render such lands sanitary; such board shall also have power upon any such appeals to determine the amount to be in conformity with the provisions of section 982A, apportioned to and assessed against each lot or parcel for such drains or ditches and for the lands acquired therefor and for all other cost, if any, of such drainage system, and whether or not any lands are improperly included in or excluded from the drainage district. The decision of a majority of the board as to the necessity and nature and extent of the improvements and as to the apportionment of the cost of any drainage system shall be final and conclusive upon all parties in interest. The board shall appoint a time and place for hearing, first giving reasonable notice thereof to the president of the board of health, the superintendent of public works, and the owner or occupant of the land in question. Service of such notice shall be as provided in section 978. As compensation for their services each member of the board shall be entitled to receive \$5 for each day of actual service."

SEC. 5. Section 981 of the Revised Laws of Hawaii, 1915, is hereby amended to read as follows:

"SEC. 981. *Plans, etc.*—The superintendent of public works shall transmit to the board with each appeal the appropriate map or plan (or a copy thereof) of the lands to be improved prepared as aforesaid in accordance with the requirements of section 976A, and shall also transmit to the board with each appeal a statement of the matters and things required as aforesaid by section 976A to be noted upon or to accompany said map."

SEC. 6. A new section is hereby added to the Revised Laws of Hawaii, 1915, to be known as section 981A, and to read as follows:

"SEC. 981A. *Entry upon and acquisition of land*.—The superintendent of public works shall have power to enter upon all lands on the routes of such proposed drains

or ditches for the purpose of examining, surveying, and laying out the route thereof, and upon all lands proposed to be included in any such drainage district for the purpose of determining whether the same or any portion thereof shall be included in such district, and to institute and conduct proceedings for the condemnation of all lands declared by him when his order is not appealed from or by the aforesaid board on appeal, to be necessary for rights of way for such drains or ditches. In acquiring any such lands the method pursued shall be as prescribed in chapter 48 of the Revised Laws of Hawaii, 1915: *Provided, however*, That in acquiring by condemnation proceedings any land situated within such drainage district the award of compensation therefor shall be without deduction for any benefits accruing to the remainder of the lot or parcel by reason of the construction of such improvement.

"Any lands acquired by condemnation as aforesaid for rights of way for drains or ditches shall be paid for out of any funds available for the improvement of any lands under this chapter."

SEC. 7. A new section is hereby added to the Revised Laws of Hawaii, 1915, to be known as section 982A, and to read as follows:

"SEC. 982A. *Cost of improvement; how apportioned.*—The cost of the improvements made or completed by the superintendent of public works shall be apportioned as follows:

"1. The cost of filling any lot or parcel shall be borne by such lot or parcel;

"2. The cost of any drainage system, including the cost of drains or ditches, damages for property taken for the same, and other expenses, if any, shall be apportioned among all the lots or parcels in the drainage district in proportion to their respective areas."

SEC. 8. Section 983 of the Revised Laws of Hawaii, 1915, is hereby amended to read as follows:

"SEC. 983. *Lien.*—The cost of the improvements made or completed by the superintendent of public works as determined and apportioned pursuant to the provisions of this chapter shall constitute a lien upon the land improved, which lien shall have priority over all other liens."

SEC. 9. Section 987 of the Revised Laws of Hawaii, 1915, is hereby amended to read as follows:

"SEC. 987. *Appropriation.*—There is appropriated out of the general revenues the sum of \$300,000 to be used for the purpose of carrying out the provisions of this chapter, and for the purpose of improving lands in government ownership which are low, insanitary, and dangerous to public health, which sum shall be set aside in the treasury of the Territory as a special fund for use for such purposes, and all moneys withdrawn from such fund shall be reimbursed or restored thereto so far as may be out of any moneys repaid or collected under the provisions of this chapter."

#### Nuisances—Abatement of. (Act 96, Apr. 16, 1915.)

SECTION 1. Section 930 of the Revised Laws of Hawaii, 1915, is hereby amended to read as follows:

"SEC. 930. The board of health and its agents shall examine into all nuisances, foul or noxious odors, gases or vapors, water in which mosquito larvæ breed, sources of filth, and all causes of sickness or disease, on shore, and in any vessel, which may be known to them or brought to their attention, which in their opinion are dangerous or injurious to health, and into any and all conditions created or existing which cause or tend to cause sickness or disease or be dangerous or injurious to health, and shall cause the same to be abated, destroyed, removed, or prevented."

SEC. 2. A new section is hereby added to the Revised Laws of Hawaii, 1915, to be known as section 931a, said section to read as follows:

"SEC. 931a. To enable the board of health to carry out the provisions of chapter 66 of the Revised Laws of Hawaii, 1915, the sum of \$1,000 is hereby appropriated as a special fund to be deposited in the Territorial treasury and to be a continual deposit, subject to the control of the board of health through its president, to be used from time to time in removing 'any such nuisance, foul or noxious odors, gases or vapors, water in which mosquito larvæ breed, sources of filth, or cause of sickness or disease' as contemplated or required by this chapter. All moneys withdrawn from such fund for such purposes shall be reimbursed or restored thereto so far as may be out of any moneys repaid or collected under the provisions of this chapter and shall then be available for further use."

**Opium—Sale and Use. (Act 143, Apr. 23, 1915.)**

SECTION 1. Section 2072 of the Revised Laws of Hawaii, 1915, is hereby amended to read as follows:

"SEC. 2072. *Sale of opium.*—The board of health may, upon the conditions to be named in such authorization, authorize any duly qualified physician or surgeon, or any person holding a license to sell poisonous drugs, to sell for medicinal purposes only, opium and preparations thereof: *Provided, however,* That no person shall sell or furnish opium or any preparation thereof, except upon the written prescription of a duly licensed physician signed by him, and such prescription shall be written in ink, bear the name of the person to whom issued, the date of its issuance, the time of its expiration, and state the maximum quantity that may be sold or furnished under such prescription."

SEC. 2. Section 2075 of the Revised Laws of Hawaii, 1915, is hereby amended to read as follows:

"SEC. 2075. *Using or smoking opium; penalty.*—Any person who shall use or smoke opium or any preparation thereof, or have the same in his possession, except as provided in sections 2072 and 2074, shall be guilty of a misdemeanor and upon conviction shall be punished by a fine of not less than \$10, nor more than \$100, or by imprisonment not more than six months."

**Insane Persons and Persons Addicted to Excessive Use of Drugs or Liquor—Care, Control, and Treatment. (Act 187, Apr. 27, 1915.)**

SECTION 1. There shall be established and used in connection with the insane asylum of the Territory of Hawaii, a separate department, or branch thereof, to be known as the "detention house," which shall be specially designed and equipped for the active and special medical care and treatment of insane persons of the acute and curable class, or whose recovery or improvement would in the judgment of the commissioners of insanity be facilitated by their detention separate and apart from other inmates of the asylum whose character of affliction, conduct, or presence would tend to retard recovery in such apparently curable cases and where separate provision and accommodation may be made for patients more suitably with reference to their customary station in life and where patients may be separately maintained and treated wholly or in part at the expense of their own estate or relatives or other persons who may make provision therefor.

SEC. 2. *Special ward.*—There shall be a special ward in said detention house for the reception and special care, control, and treatment of persons not necessarily insane but committed thereto as patients addicted to the excessive use of drugs or liquor.

SEC. 3. For said purposes the board of health is hereby directed to select and set apart or acquire by purchase or otherwise suitable land upon which to erect a suitable building or buildings, and properly equip the same.

SEC. 4. *Management of detention house.*—Said detention house, including the special ward, shall be under the immediate management of the superintendent of the insane

asylum subject to the general direction and control of the board of health in the same manner as provided by law for the insane asylum.

SEC. 5. *Use of detention house.*—Any person who has been committed to the insane asylum shall be subject to transfer from the main institution to said detention house or from said detention house back to the main institution, from time to time, as the commissioners of insanity shall in their judgment order or approve. Any such person may also be transferred by the commissioners to said special ward; but no person committed as a patient addicted to the excessive use of drugs or liquor shall be subject to transfer from the special ward to the insane asylum except upon a legal adjudication of his insanity.

SEC. 6. *Trust funds for maintenance of patient.*—The board of health is hereby authorized to accept and hold in behalf of the Territory any grant, gift, or devise of money or property in trust for the use and benefit either for the insane asylum as a whole, or any department thereof, or for male or female patients, or for the special ward, or for the use and benefit of any individual inmate or inmates or class of inmates of the asylum or special ward, or for any other incidental purpose; and shall cause each such gift, grant, or devise to be kept as a distinct fund to be used, invested, applied, and otherwise disposed of according to the terms incident thereto; and they shall include in each report to the governor a statement showing all the funds and property so received or held and the condition and application thereof.

SEC. 7. *Proclamation; special ward.*—Upon the completion and equipment of said detention house and special ward, the board of health shall report such facts to the governor, who shall thereupon issue a proclamation giving public notice that the said special ward is prepared to receive patients, a copy of which proclamation shall also be forwarded by mail to each circuit judge and district magistrate in the Territory.

SEC. 8. *Examination as to persons addicted to the excessive use of drugs or liquor; petition; warrant.*—Upon the filing in any circuit or district court by any relative, next friend, or any county or city and county sheriff or deputy, of a verified petition setting forth that any person within the jurisdiction of such court is a patient addicted to the excessive use of drugs or liquor and in need of care and treatment, or that it is dangerous for said person to be at large, and also stating therein the petitioner's relationship, if any, and the indication of lack of self-control of such alleged patient in the use of any such drugs or liquor, and praying the court to inquire into the matter and commit such person as a patient addicted to the excessive use of drugs or liquor, the judge of such court shall require that such alleged patient be brought before him, and when from such petition or otherwise it appears necessary, may issue a warrant directed to the sheriff or deputy sheriff of the county or city and county, or to the high sheriff or his deputy, requiring him forthwith to arrest and bring such person before the court for examination.

It shall thereupon be the duty of the judge of such court to examine the alleged patient brought before him and at such hearing the alleged patient shall have the right to be heard personally or by counsel, and to produce and have subpoenaed witnesses on his behalf. Before any such examination shall be made, and if such patient shall have no other counsel, the judge shall give reasonable notice to the county attorney, who shall appear and take such action as may be necessary to protect the rights of the alleged patient and the interests of the Territory. The judge shall in any case render and file his decision thereon in writing, including a statement of the facts as found by him, and the reasons therefor and enter judgment accordingly, and if the judgment is for commitment shall forward a copy thereof to the superintendent of the insane asylum.

SEC. 9. *Commitment of patients addicted to the excessive use of drugs or liquor; term.*—If it shall be determined by the said judge that the person so brought before him for examination is a patient addicted to the excessive use of drugs or liquor, or lacks self-control in the use of any such drugs or liquor, and is in need of detention and



special treatment therefor, such person shall be committed by said court to the special ward of said detention house as a patient. The term of detention shall be for an indeterminate period and until such person shall be discharged therefrom according to law: *Provided*, That no person shall be confined in said special ward without being released on parole at least once a year.

SEC. 10. *Appeal*.—Said alleged patient addicted to the excessive use of drugs or liquor or any relative or next friend on his behalf may appeal to the commissioners of insanity from any judgment of commitment as aforesaid, by filing notice of such appeal in the court of commitment within five days, and a copy thereof with the chairman of the commissioners of insanity within 10 days after entry of such judgment of commitment, which appeal may be taken without payment of any costs in the court of commitment. Upon such appeal the commissioners of insanity shall hear and determine the same in the same manner as by law provided in the case of an appeal from the commitment of an alleged insane person and their decision thereon shall be final.

SEC. 11. *Voluntary commitment of patients addicted to the excessive use of drugs or liquor*.—Any person may be committed to the special ward upon his own application to the judge of any circuit or district court: *Provided*, That he shall sign a voluntary application for such commitment, and from time to time pay the maintenance charges required by the board of health as the same shall accrue.

SEC. 12. *Maintenance fund for special ward*.—The board of health shall from time to time, either by general resolution or specifically in any particular case or class of cases, fix a sum not to exceed \$25 per week as a maintenance fee or charge to be paid by the patient, and the superintendent of the asylum shall collect the same from such patients or out of their property or from any person or persons legally bound for their support. All sums so collected shall be deposited as a special fund in the treasury and shall be available only for the maintenance of said special ward as the board of health shall determine. If the board shall deem it a hardship to compel any patient or those legally liable for the support of such patient to pay said maintenance fees, it may relieve such patient or persons from any part or all of such burden as may seem reasonable and just.

SEC. 13. *Treatment of patients addicted to the excessive use of drugs or liquor*.—Persons committed as patients addicted to the excessive use of drugs or liquor shall be given such method of treatment as in the judgment of the superintendent and the commissioners of insanity will best tend to eliminate the effects of drugs or liquor, to build up their systems physically and mentally, and to strengthen their moral character and ability to resist the temptation of drugs and liquor.

SEC. 14. *Parole of patients addicted to the excessive use of drugs or liquor; recommitment*.—Whenever any patient shall appear to be a suitable case for parole, the superintendent may recommend such parole to the commissioners of insanity, and the commissioners may parole such patient, either for a specific or indeterminate period, under such restrictions as they may deem proper, and provided such patient shall pledge himself to abide by the terms of such parole and the order of the commissioners respecting the use of drugs or liquor, and shall report in person or in writing as the commissioners shall require, and submit to all examinations from time to time as the commissioners may require during the parole. If at any time any patient on parole shall fail to comply with any of the conditions of his parole, or refuses to submit to any order of the commissioners respecting the same as aforesaid, or the commissioners are otherwise satisfied that such patient requires further detention and treatment in the special ward, the commissioners may cancel his parole and summarily remand him to the special ward, and for such purpose may issue a writ of remand of such person directed to the sheriff or deputy sheriff of the county or city and county or to the high sheriff or his deputy, commanding such officer to take said patient into custody and deliver him to the superintendent of said special ward.



SEC. 15. *Discharge of patients addicted to the excessive use of drugs or liquor.*—Any person committed as a patient, or any person in his behalf, may apply to the commissioners of insanity for discharge from the special ward, and the commissioners shall thereupon make an examination of such patient, and if the commissioners are satisfied that such patient is cured, or fit to be allowed at large without danger to himself or any other person, or that such person has regained his self-control respecting the use of drugs or liquor, they may discharge such patient. The commissioners may in their discretion if discharge be denied nevertheless release such patient on parole. Whenever any patient is discharged from the special ward, the commissioners shall sign and deliver a certificate of discharge to such patient, and also forward a certified copy of such discharge to the circuit or district court of the circuit or district from whence such patient was committed, and the judge shall file the same with the record of commitment.

SEC. 16. *Duties and powers of commissioners of insanity.*—In all matters affecting said detention house and special ward, and in all proceedings by and before the commissioners of insanity under the provisions of this act, the commissioners shall perform the duties and functions required of them and have and exercise any and all of the powers and authority in them vested, as though under sections 1076 to 1091, inclusive, of the Revised Laws of Hawaii, 1915, relating to insane persons, not inconsistent herewith.

SEC. 17. *Compensation of commissioners.*—For each examination made by the commissioners of insanity of any insane or alleged insane patient for the purpose of determining the advisability or necessity of transferring such patient to or from the detention house or special ward the commissioners shall each be entitled to receive a fee of \$2.50, to be paid by or out of the estate of such patient. For each examination of any patient committed to the detention house or special ward, whether upon an appeal or an application for parole or discharge, the commissioners shall each be entitled to receive a fee of \$5, to be paid by or out of the estate of such patient. If in any case any alleged insane person examined for transfer to or from said detention house or special ward, or any person examined on appeal or for parole or discharge from said detention house or special ward, shall be wholly unable to pay said fees, or if, on any application for parole or discharge or on an appeal, the parole or discharge shall be granted or the appeal sustained, the fees for examination shall be a charge upon the county or city and county from which said patient was committed, similarly as provided by section 1084 of the Revised Laws of Hawaii, 1915, in the case of examinations of insane persons for discharge from the insane asylum.

#### **Foods and Drugs—Adulteration and Misbranding. (Act 78, Apr. 13, 1915.)**

SECTION 1. Section 990 of the Revised Laws of Hawaii, 1915, is hereby amended by deleting the words "or drink by man," and inserting the words "drink, confectionery, or condiment by man or animals" after the word "food," so that the last clause of said section shall read as follows:

"The term 'food' as used herein shall include all articles used for food, drink, confectionery, or condiment by man or animals, whether simple, mixed, or compound."

SEC. 2. Section 991 of the Revised Laws of Hawaii, 1915, is hereby amended by adding, after the word "produced," the following:

"Any drug or article of food shall also be deemed to be misbranded within the meaning of this chapter when in package form, if the quantity of the contents be not plainly and conspicuously marked on the outside of the package in terms of weight, measure, or numerical count: *Provided, however,* That reasonable exemptions shall be permitted, and tolerances and also exemptions as to small packages shall be established by rules and regulations made by the territorial board of health."

SEC. 3. Section 993 of the Revised Laws of Hawaii, 1915, is hereby amended by adding thereto the following sentence:

"The board of health may also appoint deputy food commissioners or analysts."

SEC. 4. A new section is hereby added to the Revised Laws of Hawaii, 1915, to be known as section 994A, as follows:

"SEC. 994A. *Duties of deputy food commissioners or analysts.*—The deputy food commissioners or analysts shall perform such duties as the food commissioner or analyst or the board of health may from time to time prescribe."

SEC. 5. Section 997 of the Revised Laws of Hawaii, 1915, is hereby amended to read as follows:

"SEC. 997. *Powers of commissioner and deputy commissioners.*—The food commissioner or his deputies shall have the power in the performance of their duties to enter into any creamery, factory, restaurant, store, salesroom, storage-room, drug store, or laboratory, or any place where they have reason to believe food, drink, or drugs are made, prepared, sold, or offered for sale, and to open any cask, tub, bottle, case, or package containing or supposed to contain any article of food, drug, or drink, and examine or cause to be examined the contents thereof. In case any drug or article of food is found to be adulterated or misbranded within the meaning of this chapter and the owner or person in charge thereof refuses to comply with the instructions of the food commissioner or his deputies for the proper disposal thereof, such drug or article of food shall be liable to seizure. Upon the request of the food commissioner or his deputy, made to any court having jurisdiction over such matters, the said court shall order and direct that such drug or article of food be seized and delivered into the custody of the court and the same shall be held in such custody until a hearing has been held to determine as to whether or not it is adulterated or misbranded. If upon such hearing the court decides that the drug or article of food seized is adulterated or misbranded within the meaning of this chapter, said court shall order the same destroyed or sold, but it shall only be sold in case it is fit for food and not dangerous to health: *Provided, however,* That upon the payment of the costs of any such proceedings and any fine hereunder, and the execution and delivery of a good and sufficient bond conditioned that such drug or article of food will not be sold or otherwise disposed of contrary to the provisions of this chapter, the court may order the same delivered to the owner thereof."

#### **Milk—Sale of. (Act 45, Apr. 6, 1915.)**

SECTION 1. Section 2053 of the Revised Laws of Hawaii of 1915 is amended to read as follows:

"SEC. 2053. *Fee.*—The annual fee for a license to sell milk shall be \$2.50: *Provided, however,* That any person having no more than two milch cows may sell the milk from such cows without a license therefor; but such person must comply with any city and county ordinance or county ordinance relating thereto: *And provided also,* Such person must comply with such rules and regulations of the board of health as apply."

#### **Cattle—Slaughtering of. Beef—Sale of. (Act 26, Mar. 24, 1915.)**

SECTION 1. Section 2007 of the Revised Laws of Hawaii of 1915 is amended to read as follows:

"SEC. 2007. *Fee, to slaughter and sell.*—The annual fee for a license to slaughter cattle and sell beef shall be \$100 for the district of Honolulu and \$20 for each other district: *Provided, however,* That any person may slaughter one head of cattle per month and sell such beef without a license therefor, provided such beef shall be of his own raising and slaughtered on his own premises; but such person must comply with any city and county ordinance or county ordinance relating thereto: *And provided, also,* Such person must comply with the rules and regulations of the board of health

as apply: *And provided, further*, That any person so slaughtering and selling beef without a license shall keep a full and accurate record concerning every animal killed, as provided by section 2008 of the Revised Laws of Hawaii of 1915."

SEC. 2. This act shall take effect July 1, 1915.

**Swine—Slaughtering of. Pork—Sale of. (Act 18, Mar. 23, 1915.)**

SECTION 1. Section 2011 of the Revised Laws of Hawaii of 1915 is amended to read as follows:

"SEC. 2011. *Fee, to slaughter and sell.*—The annual fee for a license to slaughter swine and sell pork shall be \$40 for the district of Honolulu and \$20 for each other district: *Provided, however*, That any person may slaughter one swine per month and sell the pork without a license therefor, provided such swine shall be of his own raising and slaughtered on his own premises; but such person must comply with any city and county ordinance or county ordinance relating thereto: *And provided, also*, Such person must comply with such rules and regulations of the board of health as apply."

SEC. 2. This act shall take effect July 1, 1915.

**Water Supplies—Appointment of Commission to Investigate. (Act 36, Mar. 31, 1915.)**

SECTION 1. The governor is hereby authorized to appoint a commission of three persons, one or more of whom shall be a member or members of the legal profession which shall serve without pay, and which shall collect and examine available data and information relative to the water resources, both underground and surface, and both privately and publicly owned or controlled, in the Territory of Hawaii;

Which shall also examine and make a study of existing laws pertaining to the diverting, developing, using, conserving, holding, and wasting of water;

Which shall, if deemed necessary, employ the services of legal and technical experts;

Which shall have the power to visit, examine, and measure all existing water sources, channels, ditches, wells, tunnels, or other structures used for transporting or utilizing water; and

Which shall make such recommendations and draft such legislation as may by it be deemed necessary to serve the best interests of the people of the Territory of Hawaii, and shall embody the same in a report to the governor on or before January 1, 1917.

SEC. 2. There is hereby appropriated out of the general revenues the sum of \$5,000 for defraying the expenses of said commission, to be disbursed on warrants of the auditor, issued on approved vouchers of the chairman of said commission.

**Advertisements—False or Fraudulent Prohibited. (Act 124, Apr. 20, 1915.)**

SECTION 1. If any person, firm, corporation, or association, or any employee thereof, in a newspaper, circular, form letter, or other publication published, distributed, or circulated in this Territory, or on any bill board, sign, card, label, or other advertising medium displayed on, in, or near a street, electric car, automobile, auto truck, wagon, carriage, motorcycle, bicycle, show case, store, or other place in this Territory knowingly makes or disseminates, or causes to be made or disseminated, any statement or assertion of fact concerning the quantity, the quality, the method of production or manufacture, the cost of production, the cost to the advertiser or vendor, the present or former price, present or prospective value or the former, present or prospective earning power, or the reason for the price of such merchandise, shares of stock, bonds, mortgages, notes, copartnership units, or service offered for sale or advertised by such person, firm, corporation, or association, or concerning the manner or source of production or purchase, or the possession or rewards, prizes or distinctions conferred on

account of the purchase or possession of such merchandise, shares of stock, bonds, mortgages, notes, copartnership units, or service, which statement or assertion has the appearance of an offer advantageous to the purchaser, and is untrue or calculated to mislead, the person or corporation or firm, or the member or members of a firm, or directors of a corporation, or directors or trustees of an association, causing such statement or assertion to be made or disseminated, also the employee or agent making or disseminating such statement or assertion, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be liable to a fine of not less than \$10 nor more than \$500, or imprisonment for not more than one year, or both such fine and imprisonment for each and every offense.

**Births—Registration of. (Act 48, Apr. 6, 1915.)**

SECTION 1. Section 1133 of the Revised Laws of Hawaii, 1915, is hereby amended to read as follows:

"SEC. 1133. *Births.*—Each registrar shall enter in said record, in respect of each birth occurring in his district, the following facts, so far as they can be ascertained by him, viz: The name of the father, the name of the mother, the date of the birth, the sex of the child, the name of the child, if it has been named, the locality of its birth, and whether the child is legitimate or illegitimate: *Provided, however,* That said registrar shall keep a separate record of all births reported later than six months after the date of said birth, which record shall not be admissible as evidence of any statement therein made, nor shall any certified copy of such record or any part thereof be furnished by said registrar."

**Laundries, Dyeing Works, Cleaning Works, and Dyeing and Cleaning Works—  
License. (Act 107, Apr. 16, 1915.)**

SECTION 1. That section 2042 of the Revised Laws of Hawaii, 1915, be and the same is hereby amended so as to read as follows:

"SEC. 2042. *Conditions, fee.*—The treasurer may issue to any person, firm, or corporation a license to maintain and operate a laundry, dyeing or cleaning, or dyeing and cleaning works upon such conditions as to location and otherwise as shall be set forth in the license. Any such license shall not be issued except upon a certificate of the board of health setting forth that the location at which it is proposed to operate such laundry, dyeing or cleaning, or dyeing and cleaning works is suitable for the purpose. The annual fee for a license for either a laundry, dyeing or cleaning, or dyeing and cleaning works shall be \$25: *Provided, however,* That the provisions of this section shall not apply to any laundries operated for profit, where not more than two persons are engaged, including the proprietor or proprietors of such laundry, and conducted in compliance with the rules and regulations of the board of health: *And provided further,* That this section shall not apply to laundries conducted in compliance with the rules and regulations of the board of health by persons in their own homes for members of their household only."

## MUNICIPAL ORDINANCES, RULES, AND REGULATIONS PERTAINING TO PUBLIC HEALTH.

### NEW YORK, N. Y.

#### Communicable Diseases—Notification of Cases—Cultures in Diphtheria—Carriers. (Reg. Dept. of Health, Mar. 30, 1915.)

Regulations of the Department of Health of the City of New York, adopted March 30, 1915, effective April 1, 1915, relating to section 86 of the Sanitary Code, which provides as follows:

SEC. 86. *Duty of persons in charge of hospitals, and of physicians, to report infectious diseases.*—It shall be the duty of the manager or managers, superintendent, or person in charge of every hospital, institution, or dispensary in the city of New York to report to the department of health in writing the full name, age, and address of every occupant or inmate thereof or person treated therein affected with any one of the infectious diseases included in the following list, with the name of the disease, within 24 hours after the time when the case is diagnosed, and it shall be the duty of every physician in the said city to make a similar report to the said department within the same period relative to any person found by such physician to be affected with any one of the said infectious diseases, stating, in each instance, the name of the disease: Acute anterior poliomyelitis (infantile paralysis), anthrax, Asiatic cholera, diphtheria (croup), dysentery (epidemic), epidemic cerebrospinal meningitis, glanders, suppurative conjunctivitis, hook-worm disease, leprosy, malarial fever, measles, mumps, paratyphoid fever, plague, pulmonary tuberculosis, rabies, rubella (German measles, rōtheln), scarlet fever, epidemic septic sore throat, smallpox, tetanus, trachoma, trichinosis, tuberculous meningitis, typhoid fever, typhus fever, varicella (chickenpox), whooping cough, and yellow fever: *Provided*, That if the disease is typhoid fever, scarlet fever, diphtheria, epidemic dysentery, or epidemic septic sore throat every such report shall also show whether the patient has been, or any member of the household in which the patient resides is, engaged or employed in the handling of milk, cream, butter, or other dairy products for sale or preliminary to sale.

REGULATION 1. It shall be the duty of every physician to report to the department of health the full name, age, and address of every person affected with a communicable disease, together with the name of the disease, within 24 hours from the time when the case is first seen by him; such report shall be made in cases of smallpox, typhus fever, or cholera by telephone or messenger direct to the borough office in which the case is located and shall be followed by a postal card report giving full details.

REG. 2. In every case of illness where there is a reason to suspect diphtheria it shall be the duty of the attending physician promptly to take a culture from the throat of such suspected person and submit the same for examination to the laboratory of the department of health, or such laboratory as may be approved by the department of health.

REG. 3. Any person who is a "carrier" of the disease germs of Asiatic cholera, bacillary dysentery, epidemic cerebrospinal meningitis, poliomyelitis, or typhoid fever shall be subject to the regulations governing clinical cases of these respective diseases.



**Eggs—Breaking Out. (Reg. Dept. of Health, Mar. 30, 1915.)**

Regulations of the Department of Health of the City of New York, adopted March 30, 1915, effective April 1, 1915, relative to section 331 of the Sanitary Code, which provides as follows:

SEC. 331. *Business of breaking out eggs regulated; sale of "spots" and "spot eggs" prohibited; the term "spot" and "spot eggs" defined.*—No person shall break out eggs for sale or conduct the business of breaking out eggs to be canned, frozen, dried, or used in any other manner in the city of New York, and no eggs broken from the shell, whether canned, frozen, dried, or treated in any other manner, shall be received, held, kept, sold, offered for sale, or delivered in the said city without a permit therefor issued by the board of health or otherwise than in accordance with the terms of said permit and with the regulations of said board.

(a) No person shall receive, hold, keep, sell, offer for sale, or deliver, as or for food or to be used in food, in the city of New York, any canned, frozen, or dried eggs, or eggs broken from the shell, which are adulterated or to which has been added any poisonous ingredient or any ingredient which may render such eggs injurious to health, or to which has been added any antiseptic, preservative, or foreign substance not evident and not known to the purchaser or consumer, or which shall contain filthy, decomposed, or putrid animal matter.

(b) No person shall keep, sell, or offer for sale as food any "spots" or "spot eggs." Such eggs in the possession of a dealer in food shall, *prima facie*, be deemed to be held, kept, and offered for sale as such food.

The term "spots" and "spot eggs," when used herein, shall be taken to mean all eggs that are partially hatched, broken yolked, blood ringed, or veined, and all unsound eggs, including those affected by molds or which are partly decomposed or that have become sour.

REGULATIONS GOVERNING THE BREAKING OUT OF EGGS FOR EDIBLE PURPOSES.

REGULATION 1. *Eggs not to be broken from shell in any stable or other insanitary place.*—Eggs shall not be broken from shell for edible purposes in any stable, room used for sleeping purposes, or in any room or place which is dark, damp, poorly ventilated, or insanitary.

REG. 2. *Water-closet compartments.*—Every water-closet compartment, except when provided with mechanical means of ventilation, shall have a window at least 1 foot by 3 feet between stop-heads opening to the external air and the entire window shall be made so as to readily open, or an opening connected with the external air measuring at least 144 square inches for each water-closet or urinal, with an increase of 72 square inches for each additional water-closet or urinal. The door or doors of the water-closet compartment shall be self-closing. Where the water-closet is in direct communication with the room in which food is prepared or stored, if required by the department of health, a suitable and properly lighted vestibule shall be provided. The door of the vestibule shall be self-closing. All water-closet fixtures, water-closet compartments, and vestibules shall be maintained in a clean and sanitary condition and in good repair.

REG. 3. *Stables.*—Eggs shall not be broken from shell for edible purposes in any room located in a building where horses, cows, or other animals are stabled, except when said room is separated from said stable by impenetrable walls without doors, windows, or other openings.

REG. 4. *Rubbish, useless or offensive material.*—No accumulation of rubbish, useless or offensive material shall be permitted in any room or place where eggs are broken from shell for edible purposes.



REG. 5. *Lighting*.—All rooms in which eggs are broken from shell for edible purposes shall be properly and adequately lighted so that all parts may be readily inspected.

REG. 6. *Screening of doors, windows, and other openings*.—All doors, windows, and other openings shall be properly screened from May 1 to October 31. Screen doors shall be provided with self-closing devices.

REG. 7. *Construction of walls and ceilings*.—Walls and ceilings shall be of smooth, hard material and must be clean and sanitary and in good repair, and shall be kept well painted with a light-colored waterproof paint. All joints shall be the so-called cove or sanitary joints.

REG. 8. *Construction of floors*.—Floors shall be smooth and water-tight and must be kept clean and sanitary and in good repair. Floors, where required, shall be properly graded and drained to one or more drains properly trapped and sewer-connected and shall be scrubbed, flushed, and deodorized at the close of business each day.

REG. 9. *Construction of benches, tables, etc.*—All benches, tables used in the breaking out of eggs for food purposes shall be of smooth, hard material and constructed so that they can be kept clean and sanitary.

REG. 10. *Cleaning of floors, walls, and utensils*.—All floors, walls, and utensils must be thoroughly cleaned and washed at the close of the day's work.

REG. 11. *Sinks and water supply*.—Suitable sinks, with an adequate supply of running hot and cold water, shall be provided.

REG. 12. *Cleanliness of utensils*.—All utensils used in the breaking out of eggs for edible purposes, shall be properly cleansed with hot water after being used and no utensil shall, under any circumstances, be used a second time unless it shall have been, after previous use thereof, so cleansed, and in such cleansing the use of water which has become insanitary by previous use is prohibited.

REG. 13. *Use of rusted or badly worn utensils prohibited*.—The use of any utensil used in the breaking out of eggs for edible purposes, which is badly worn, rusted, corroded, or in such condition that it can not be rendered clean and sanitary by washing, is prohibited.

REG. 14. *Construction of apparatus, utensils and appurtenances*.—All apparatus, utensils, and appurtenances thereof, used in the breaking out of eggs for edible purposes, shall be so constructed and placed that they can be readily cleaned and shall be kept clean and sanitary and in good repair.

REG. 15. *Apparatus for cooling eggs to be provided*.—Proper apparatus for immediately cooling the eggs to a temperature of less than 45° F. shall be installed in all establishments where eggs are broken out for food purposes.

REG. 16. *Temperature of eggs*.—Eggs broken from shell intended for food purposes shall be deemed adulterated if the temperature of the eggs is above 45° F.

REG. 17. *Light leakers*.—Eggs which are commercially known as "light leakers" and where the contents are sweet and clean, may be broken out for food purposes provided said eggs have been kept in a clean and sanitary manner, approved by the department of health, and properly protected from dust, dirt, and other contaminating matter.

REG. 18. *"Spots" or "spot eggs"*.—No person shall break out for food purposes eggs which are known as "spots" or "spot eggs." The term "spots" and "spot eggs" when used herein means all eggs that are partially hatched, broken yolked, blood ringed, or veined; and all unsound eggs, including those affected by moulds or which are partly decomposed, or have become sour.

REG. 19. *Covering of eggs broken from shell*.—No receptacles containing eggs broken from shells shall be allowed to remain uncovered, except the receptacle into which the eggs are actually being broken.

**REG. 20. Denaturing of "spots" or "spot eggs."**—During the process of breaking out or candling of eggs for food purposes all eggs found to be "spots" or "spot eggs" shall be immediately denatured. The term "denatured" when used herein refers to the treatment of eggs with a substance approved by the department of health, the presence of which on the eggs prevents their use for human food.

**REG. 21. Receptacles for "spots" and "spot eggs."**—Suitable receptacles for "spots" and "spot eggs" shall be provided in the candling and breaking out room. Such receptacles shall at all times contain a sufficient quantity of the denaturant approved by the department of health, and shall be stenciled with 2-inch block letters "spot eggs denatured with ———," followed by the name of the denaturant.

**REG. 22. Marking of containers.**—Each container or receptacle used for bringing eggs broken from shells intended for food purposes into the city of New York or holding, delivering, offering for sale, or selling same shall be plainly and indelibly marked with the date and place where eggs were broken from shell and the name of person, firm, or corporation offering for sale, selling, or delivering same.

**REG. 23. Preservatives, coloring matter.**—The presence in any part of an establishment of any prohibitive coloring matter or preservative shall be deemed prima facie evidence of its use, and the presence of any such material may be sufficient cause for the prosecution of the owners and proprietors of the establishment.

**REG. 24. Garbage receptacles.**—Suitable water-tight, properly covered, galvanized iron, or other sanitary metal cans for receiving and holding without leakage all garbage and other waste material shall be provided. A tight-fitting cover shall be provided for each can. All garbage and other waste material shall be removed from the premises daily and shall not be allowed to become a nuisance.

**REG. 25. Health of employees.**—No person who has any infectious or venereal disease shall be permitted to prepare or handle food or drink or any utensils used in preparing, manufacturing, or handling same.

**REG. 26. Habits of employees.**—All persons breaking out eggs for edible purposes shall be cleanly in their habits and must wash their hands before beginning work and after visiting toilet.

**REG. 27. Washing facilities for employees.**—Soap, running water, and fresh, clean individual towels shall be provided for each employee, and the same shall be readily accessible to these employees. Use of common towel is prohibited.

**REG. 28. Clothing of employees.**—All persons breaking out eggs for edible purposes shall wear clean, washable, outer garments.

**REG. 29. Spitting signs.**—Placards prohibiting spitting on floors shall be conspicuously posted.

**REG. 30. Cuspidors.**—A sufficient number of cuspidors shall be provided and shall be cleansed and disinfected daily.

#### REGULATIONS GOVERNING THE BREAKING OUT OF EGGS FOR INEDIBLE PURPOSES.

**REG. 1. Lighting.**—All rooms in which eggs are broken from shell for inedible purposes shall be properly and adequately lighted, so that all parts may be readily inspected.

**REG. 2. Construction of walls and ceilings.**—Walls and ceilings shall be of a smooth, hard material and shall be kept clean and sanitary and in good repair and shall be painted or whitewashed as frequently as may be required by the department of health.

**REG. 3. Construction of floors.**—Floors shall be cement, properly graded to sewer-connected drains, and must be kept clean and sanitary and in good repair. Floors shall be scrubbed, flushed, and deodorized at the close of business each day.

**REG. 4. Sinks and water supply.**—Suitable sinks, with an adequate supply of running water, shall be provided, and wherever required hose connection shall be installed.

REG. 5. *Garbage receptacles.*—Suitable water-tight, properly covered, galvanized-iron or other sanitary metal cans for receiving and holding without leakage all garbage, eggshells, and other waste material shall be provided. A tight-fitting cover shall be provided for each can. All garbage, eggshells, and other waste material shall be removed from premises daily and shall not be allowed to become a nuisance.

REG. 6. *Denaturing of "spots" or "spot eggs."*—"Spots" or "spot eggs" broken from shell must be immediately placed in a clean, covered metal receptacle containing a suitable denaturant. The term "spots" and "spot eggs" when used herein means all eggs that are properly hatched, broken-yolked, blood-ringed, or veined, and all unsound eggs, including those affected by molds or which are partly decomposed, or have become sour.

REG. 7. *Record to be kept of "spots" or "spot eggs."*—Every person engaged in the business of breaking out for inedible purposes eggs known as "spots" or "spot eggs" shall keep a record of the date, place, and persons from whom received.

REG. 8. *Eggs designed for use other than edible purposes.*—No person shall receive, keep, hold, offer for sale, or sell in the city of New York any eggs broken from shell designed for use other than edible purposes unless same shall have been denatured with some denaturant approved by the department of health. The term "denaturant" when used herein refers to the treatment of eggs with a substance approved by the department of health, the presence of which on the eggs prevents their use for human food.

REG. 9. *Marking all receptacles containing eggs for use other than edible purposes.*—Cans or receptacles containing eggs broken from the shells designed for use other than edible purposes shall be plainly and indelibly marked with the words "For manufacturing purposes, denatured with ———," to be followed by the name of the denaturant.

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